Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

specific topic.

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

L'AND CAPIU

```
* * * * * *
                    Welcome to STN International
                Web Page URLs for STN Seminar Schedule - N. America
NEWS 1
                 "Ask CAS" for self-help around the clock
NEWS
     3 SEP 09 CA/CAplus records now contain indexing from 1907 to the
NEWS
                present
     4 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
NEWS
                August 1, 2003
NEWS 5 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 6 AUG 18 Data available for download as a PDF in RDISCLOSURE
NEWS 7 AUG 18 Simultaneous left and right truncation added to PASCAL
NEWS 8 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Righ
                Truncation
NEWS 9 AUG 18 Simultaneous left and right truncation added to ANABSTR
NEWS 10 SEP 22 DIPPR file reloaded
NEWS 11 DEC 08 INPADOC: Legal Status data reloaded
NEWS 12 SEP 29 DISSABS now available on STN
NEWS 13 OCT 10 PCTFULL: Two new display fields added
NEWS 14 OCT 21 BIOSIS file reloaded and enhanced
NEWS 15 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 16 NOV 24 MSDS-CCOHS file reloaded
NEWS 17 DEC 08
                CABA reloaded with left truncation
NEWS 18 DEC 08
                IMS file names changed
                Experimental property data collected by CAS now available
       DEC 09
NEWS 19
                 in REGISTRY
        DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 20
NEWS EXPRESS NOVEMBER 14 CURRENT WINDOWS VERSION IS V6.01c, CURRENT
             MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
             AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
NEWS HOURS
             STN Operating Hours Plus Help Desk Availability
NEWS INTER
             General Internet Information
NEWS LOGIN
             Welcome Banner and News Items
             Direct Dial and Telecommunication Network Access to STN
NEWS PHONE
NEWS WWW
             CAS World Wide Web Site (general information)
```

of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

Enter NEWS followed by the item number or name to see news on that

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation

Patel <12/10/2003>

* * * * * * * * * * * STN Columbus * *

09951006.3

FILE 'HOME' ENTERED AT 16:24:39 ON 10 DEC 2003

CE FILE TOTAL SESSION

=> file reg COST IN U.S. DOLLARS

SINCE FILE ENTRY

0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:24:53 ON 10 DEC 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

Page 2

STRUCTURE FILE UPDATES: 9 DEC 2003 HIGHEST RN 625365-36-8 DICTIONARY FILE UPDATES: 9 DEC 2003 HIGHEST RN 625365-36-8

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

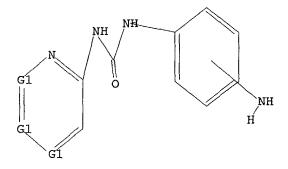
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> Uploading 10087715.2

L1 STRUCTURE UPLOADED

=> d 11L1 HAS NO ANSWERS L1STR



G1 N,CH G2 H, Cb, Cy, Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> file marpat COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.40 0.61

FULL ESTIMATED COST

FILE 'MARPAT' ENTERED AT 16:25:20 ON 10 DEC 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 139 ISS23) (20031205ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6642272 04 NOV 2003
DE 10317295 30 OCT 2003
EP 1361251 12 NOV 2003
JP 2003321470 11 NOV 2003
WO 2003092890 13 NOV 2003

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s 12 sss full L2 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s l1 sss full FULL SEARCH INITIATED 16:25:52 FILE 'MARPAT' FULL SCREEN SEARCH COMPLETED - 12706 TO ITERATE

87.1% PROCESSED 11069 ITERATIONS

50 ANSWERS

100.0% PROCESSED 12706 ITERATIONS (1 INCOMPLETE) 64 ANSWERS SEARCH TIME: 00.00.33

L2 64 SEA SSS FUL L1

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 104.95 105.56

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 16:26:31 ON 10 DEC 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December

26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Dec 2003 VOL 139 ISS 24 FILE LAST UPDATED: 9 Dec 2003 (20031209/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12

L3 64 L2

=> s CHK1

L4 379 CHK1

=> s 13 and 14

L5 0 L3 AND L4

=> s 14 and pyrazine

L6 3 L4 AND PYRAZINE

=> s 14 and quinoxzline

L7 0 L4 AND QUINOXZLINE

=> s 14 and pyridazine

L8 1 L4 AND PYRIDAZINE

=> s 14 and pyrimidine

L9 4 L4 AND PYRIMIDINE

=> s 14 and triazine

L10 0 L4 AND TRIAZINE

=> d 13 fbib hitstr abs total

- L3 ANSWER 1 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:837035 CAPLUS
- DN 139:337787
- TI Preparation of novel methoxybenzamides for use in MCH receptor related disorders
- IN Hoegberg, Thomas; Bjurling, Anna Emelie; Receveur, Jean-Marie; Little, Paul Brian; Elling, Christian E.; Norregaard, Pia Karina; Ulven, Trond
- PA 7TM Pharma A/S, Den.
- SO PCT Int. Appl., 133 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

-----PI WO 2003087045 A1 20031023 WO 2003-DK231 20030408
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG DK 2002-519 A 20020409 DK 2002-520 A 20020409 DK 2002-524 A 20020409 DK 2002-1818 A 20021125

OS MARPAT 139:337787

AΒ Title compds. I [wherein A = a linker, e.g. CHR7CONR7, CONR7, OCONR7, SO2NR7, CHR7NR7CO, NR7COR7, hexahydro-2-oxo-pyrimidine-1,3-diyl, 2-oxoimidazolidine-1,3-diyl, 1,2,4-oxadiazolediyl, 1,3,4-oxadiazolediyl, CH=CH, OCHR7, NR7CHR7, SCHR7, or (un) substituted imidazolediyl or 1,2,4-triazolediyl; Ar = independently (hetero)aryl; R1 = alkoxy; R2 = H, OH, NH2, or alkoxy; COQ = amino-substituted amide; R5 and R6 = independently H, halo, alkoxy, OH, (di)alkylamino, hydroxyalkyl, carboxamido, acyl(amido), CHO, nitrile, alkyl, alkenyl, alkynyl, SMe, (fluoro)alkyl, (fluoro)alkoxy, (fluoro)thioalkoxy, SO2NH2, (di)alkylaminosulfonyl, or alkylsulfonyl; R7 = independently H, alkyl, or alkenyl; R8 = halo, (alkyl)(cyclo)alkyl, alkenyl, alkynyl, (alkyl) (hetero) aryl, (alkyl) heterocyclyl, (aryl) alkoxy, aryloxy, dialkylamino, (di)alkylcarbamoyl, (di)arylcarbamoyl, alkanoyl(amino), aroyl (amino), SMe, (fluoro)alkyl, (fluoro)alkoxy, (fluoro)thioalkoxy, or R6ArB; B = a single bond or connecting moiety; X = H, halo, SMe, CF3, OCF3, SCF3, OMe, alkyl, or alkenyl; and physiol. acceptable salts, complexes, solvates, and prodrugs thereof] were prepd. as melanin-concg. hormone (MCH) receptor modulators. For example, coupling of procainamide with 4-trifluoromethoxyphenyl isocyanate in the presence of TEA in CH2C12

II

gave II (59%). In assays of [125I]-MCH binding and phosphatidylinositol turnover using transiently transfected COS-7 cells or stably transfected CHO cells expressing the human MCH-1 receptor, II exhibited activity with IC50 values of 0.07 .mu.M and 0.29 .mu.M, resp. Administration of II (10 mg/kg i.p.) to male Sprague Dawley rats resulted in a significant redn. of their cumulative food intake over 6 h. Thus, I and their pharmaceutical compns. are useful in the treatment or prevention of obesity, depression, diabetes, bulimia, and other MCH receptor related disorders (no data).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L3 ANSWER 2 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2003:777749 CAPLUS

DN 139:277029

 ${
m TI}$ Preparation and formulation of menthol substituted antithrombotic PAI-1 inhibitors

IN Bauer, Shawn; Mohan, Raju; Shaw, Kenneth J.; Wu, Qingyu; Ye, Bin; Buckman, Brad O.; Ghannam, Ameen; Griedel, Brian D.; Khim, Seock-Kyu; Zhao, Zuchun

PA Schering Aktiengesellschaft, Germany

SO PCT Int. Appl., 71 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATEN | T NO | • | KI | ND | DATE | | | A | PPLI | CATI | ON N | ο. | DATE | | | |
|----|-------|---------------------------|-------|-----------|-----|----------|----------|-----|-----|------|----------|----------|-------|------------|------|-----|------|
| PI | WO 20 | 0308 |)564 | – ––
A | .1 |
2003 |
1002 | | W | 0 20 |
03-и |
s750 |
6 | -~
2003 | 0312 | | |
| | M | : A) | E, AG | , AL, | AM, | ΑT, | AU, | ΑZ, | ΒA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | C | , CR | , CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | Gì | 1, HR | , HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KΡ, | KR, | KZ, | LC, | LK, | LR, |
| | | $\mathbf{L}_{\mathbf{s}}$ | S, LT | , LU, | LV, | MA, | MD, | MG, | MK, | MN, | ΜW, | MX, | ΜZ, | NO, | NZ, | OM, | PH, |
| | | PI | , PT | , RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, |
| | | U. | l, UG | , US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG, | KZ, | MD, |
| | | RU | J, TJ | , TM | | | | | | | | | | | | | |
| | RI | W: GF | I, GM | , KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW. | AT. | BE. | BG. |
| | | CF | I, CY | , CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU. | IE. | IT. | LU. | MC. |
| | | NI | , PT | , RO, | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI. | CM. | GA. | GN. | GO. |
| | | GV | , ML | , MR, | NE, | SN, | TD, | TG | | , | • | • | -, | 7 | | , | - 21 |

OS MARPAT 139:277029

GΙ

US 2002-365932PP 20020320

Me
$$O-(CH_2)_{m}AB(R^1)(CH_2)_{n}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

Me H N
$$CO_2H$$
 OH OH OH

AB Menthol-substituted compds. of formula I [R1 = H, alkyl, alkylene, aryl, haloalkyl, menthoxyalkyl, heterocyclo, absent; R2 = H, alkoxy, amino, alkylaminocarbonyl, alkyl, etc.; R3 = Ph, CO2H, alkoxy, etc.; R4 = dibenzodioxepinone, pyridinyl, etc.; A = carbonyl, absent; B = N, O, absent; AB = heterocyclo; D = N, O, absent; X = C, N; Y = alkylene, aryl, carbonyl, absent; DY = heterocyclo; Z = alkylene, sulfonyl, aminocarbonyl, carbonyl, absent; m, n, p = 0-2] are prepd. which are useful as antithrombotic agents by inhibiting plasminogen activator inhibitor-1 (PAI-1). The compds. are useful in the treatment of disease-states characterized by thrombotic activity. Pharmaceutical compns. contg. I are described. Thus, II was prepd. from 4-nitrobenzylamine hydrochloride, menthoxyacetyl chloride and 2-hydroxy-3-carboxybenzaldehyde in 90% yield.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L3 ANSWER 3 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2003:656580 CAPLUS

DN 139:197369

TI Preparation of aryl ureas with angiogenesis inhibiting activity

IN Dumas, Jacques; Scott, William J.; Elting, James; Hatoum-Makdad, Holia

PA Bayer Corporation, USA

SO PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| CMIT | | | | | | | | | | | | | | | | | |
|---------|-------------------|---|--|--|---|---|---|---|---|---|---|---|--|---|--|--|---|
| PATENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | on n | 0. | DATE | | | | |
| | | | | | | | | | | | | | | | | | |
| WO 2003 | | | | | | | | | | | | | | | | | |
| W: | Æ, | AG, | ΑL, | ΑM, | AT, | ΑU, | ΑZ, | ΒA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH. | CN. | |
| | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE. | ES. | FI. | GB. | GD. | GE. | GH. | |
| | GM, | HR, | HU, | ID, | ΙL, | IN, | IS, | JP, | KE, | KG, | KP, | KR. | KZ. | LC. | LK. | LR. | |
| | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO. | NZ. | OM. | PH, | |
| | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SK, | SL, | TJ, | TM, | TN. | TR. | TT. | TZ. | UA. | |
| | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG, | KZ. | MD. | RU. | TJ. | TM |
| RW: | GH, | GM, | KE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT. | BE. | BG. | |
| | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MC, | |
| | PATENT WO 2003 W: | PATENT NO. WO 20030682 W: AE, CO, GM, LS, PL, UG, RW: GH, | WO 2003068228 W: AE, AG, CO, CR, GM, HR, LS, LT, PL, PT, UG, US, RW: GH, GM, | PATENT NO. KI WO 2003068228 A W: AE, AG, AL, CO, CR, CU, GM, HR, HU, LS, LT, LU, PL, PT, RO, UG, US, UZ, RW: GH, GM, KE, | PATENT NO. KIND WO 2003068228 A1 W: AE, AG, AL, AM, CO, CR, CU, CZ, GM, HR, HU, ID, LS, LT, LU, LV, PL, PT, RO, RU, UG, US, UZ, VN, RW: GH, GM, KE, LS, | PATENT NO. KIND DATE WO 2003068228 Al 2003 W: AE, AG, AL, AM, AT, CO, CR, CU, CZ, DE, GM, HR, HU, ID, IL, LS, LT, LU, LV, MA, PL, PT, RO, RU, SD, UG, US, UZ, VN, YU, RW: GH, GM, KE, LS, MW, | PATENT NO. KIND DATE WO 2003068228 Al 20030821 W: AE, AG, AL, AM, AT, AU, CO, CR, CU, CZ, DE, DK, GM, HR, HU, ID, IL, IN, LS, LT, LU, LV, MA, MD, PL, PT, RO, RU, SD, SE, UG, US, UZ, VN, YU, ZA, RW: GH, GM, KE, LS, MW, MZ, | PATENT NO. KIND DATE WO 2003068228 Al 20030821 W: AE, AG, AL, AM, AT, AU, AZ, CO, CR, CU, CZ, DE, DK, DM, GM, HR, HU, ID, IL, IN, IS, LS, LT, LU, LV, MA, MD, MG, PL, PT, RO, RU, SD, SE, SG, UG, US, UZ, VN, YU, ZA, ZM, RW: GH, GM, KE, LS, MW, MZ, SD, | PATENT NO. KIND DATE A WO 2003068228 Al 20030821 W W: AE, AG, AL, AM, AT, AU, AZ, BA, CO, CR, CU, CZ, DE, DK, DM, DZ, GM, HR, HU, ID, IL, IN, IS, JP, LS, LT, LU, LV, MA, MD, MG, MK, PL, PT, RO, RU, SD, SE, SG, SK, UG, US, UZ, VN, YU, ZA, ZM, ZW, RW: GH, GM, KE, LS, MW, MZ, SD, SL, | PATENT NO. KIND DATE APPLI WO 2003068228 Al 20030821 WO 20 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, GM, HR, HU, ID, IL, IN, IS, JP, KE, LS, LT, LU, LV, MA, MD, MG, MK, MN, PL, PT, RO, RU, SD, SE, SG, SK, SL, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, | PATENT NO. KIND DATE APPLICATI WO 2003068228 Al 20030821 WO 2003-U W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, | PATENT NO. KIND DATE APPLICATION N WO 2003068228 Al 20030821 WO 2003-US410 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, | PATENT NO. KIND DATE APPLICATION NO. WO 2003068228 Al 20030821 WO 2003-US4103 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, | PATENT NO. KIND DATE WO 2003068228 Al 20030821 WO 2003-US4103 2003 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, | PATENT NO. KIND DATE APPLICATION NO. DATE WO 2003068228 Al 20030821 WO 2003-US4103 20030211 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, | PATENT NO. KIND DATE APPLICATION NO. DATE WO 2003068228 Al 20030821 WO 2003-US4103 20030211 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, | PATENT NO. KIND DATE APPLICATION NO. DATE |

Patel

Ι

NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

I

US 2003207870 A1 20031106

US 2002-354950PP 20020211 US 2003-361858 20030211 US 2002-354950PP 20020211

OS MARPAT 139:197369

GΙ

$$_{\text{F}_3\text{C}}$$

AB The title compds. ANHCONHB [A, B = (un) substituted Ph, naphthyl, 5-6 membered monocyclic heteroaryl, etc.], useful for treating diseases mediated by the VEGF induced signal transduction pathway characterized by abnormal angiogenesis or hyperpermeability processes, were claimed. Prepns. of three title ureas are described. E.g., a 3-step synthesis of the urea I (starting from Me 4-chloro-2-pyridinecarboxylate hydrochloride), was given. The KDR (VEGFR2) assay for testing the title ureas is described.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:551189 CAPLUS

DN 139:101121

TI Preparation of 1,1'-biphenyl derivatives as biaromatic ligand activators of peroxisome proliferator-activated receptors subtype gamma (PPAR gamma receptors)

IN Bernardon, Jean-Michel; Clary, Laurence; Terranova, Eric

PA Fr

SO U.S. Pat. Appl. Publ., 23 pp. CODEN: USXXCO

DT Patent

LA English

דאו רוויי 2

| FAN. | CNT 2 | | | | |
|------|-----------------------------|-------------------|----------------------|---|----------------------------------|
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| PI | US 2003134885 | A1 | 20030717 | US 2002-351425PP | 20021223
20011221
20020128 |
| PATE | | Al
Al
TION: | 20030627
20030905 | FR 2002-2647 A
FR 2001-16750
FR 2002-2647 | 20020301
20011221
20020301 |
| FAN | 2003:492185
PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| PI | FR 2833949
WO 2003055867 | Al
Al | 20030627
20030710 | FR 2001-16750
WO 2002-FR4232 | 20011221
20021209 |

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG FR 2001-16750 A 20011221 20030717 US 2002-326054 Α1 20021223

US 2003134885

FR 2001-16750 A 20011221 US 2002-351425PP 20020128 FR 2002-2647 A 20020301

MARPAT 139:101121 OS

GI

The title compds. [I; R1 = Q, CH2CHR6COR5; R2, R3 = H, C1-6 alkyl, aryl, AΒ halo, HO, C1-6 alkoxy, aryloxy, aralkyloxy, a polyether radical, NO2, C1-6 alkyl-(un) substituted NH2 group; X = N-(un) substituted CH2NHCO, NHCONH, NHCOCH2, or NHCH2CO whether read from left to right or vise versa; R4 = each (un) substituted Ph, benzyl, phenethyl, thienyl, furyl, or pyridyl; R5 = HO, C1-9 alkoxy; R6 = C1-6 alkyl, OR14, SR14; wherein R14 = C1-12 alkyl, CF3, aryl, aralkyl] are prepd. Novel pharmaceutical/cosmetic compns. contain at least one biarom. ligand activator of a PPAR.gamma. receptor, such biarom. ligand having the structural formula I and are well suited,

inter alia, for regulating and/or restoring skin lipid metab., for treating a wide variety of dermatol. afflictions, and for preventing and/or treating the signs of aging and/or dry skin. Thus, 1.27 g 5-(3'-methylaminomethylbiphenyl-4-ylmethyl)thiazolidine-2,4-dione was condensed with 1.97 g 6-(2-methoxyethoxymethoxy)naphthalene-2-carboxylic acid using 1-hydroxybenzotriazole, Et3N, and 1-ethyl-3-(3dimethylaminopropyl) carbodiimide hydrochloride in CH2Cl2 at room temp. for 3 h to give 1.97 g (62%) of 6-(2-methoxyethoxymethoxy)-N-[4'-(2,4dioxothiazolidin-5-ylmethyl)biphenyl-3-ylmethyl]-N-methylnaphthalene-2carboxamide (II). II in vitro activated PPAR.alpha. and PPAR.gamma. receptors expressed in Hela cells by 22.9 and 93.3%, resp., with AC50 of >50,000.0 and 0.55 nM, resp. (AC50 = 50% activation of the basal signal relative to the ref. agonist (-)-3-[4-[2-(benzoxazol-2ylmethylamino)ethoxy]phenyl]-2-ethoxypropionic acid). Various formulations contg. specific I compds., e.g. tablet contg. II, were illustrated.

- L3 ANSWER 5 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:527541 CAPLUS
- DN 139:79171
- TI Phenylurea derivatives as vanilloid VR1 receptor antagonists and pharmaceuticals containing them
- IN Yura, Takeshi; Motegi, Muneto; Ikegami, Yuka; Masuda, Tsutomu; Kokubo, Toshio; Urbahns, Klaus; Yoshida, Osahiro; Marushige, Makiko; Shiroo, Masahiro; Tajimi, Masaomi; Takeshita, Keisuke; Moriwaki, Toshiya; Tsukimi, Yasuhiro
- PA Bayer A.-G., Germany
- SO Jpn. Kokai Tokkyo Koho, 136 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese

FAN.CNT 2

| PA | PATENT NO JP 2003192659 | | | | MD : | DATE | | | A | PPLI | CATI | ON NC | ο. | DATE | | | |
|----|-------------------------|--|---|---|--|--|---|---|--|--|--|--|--|---|--|---|---------------------------------|
| WC | 2003
2003
2003 | 0558 | 48 | A:
A:
A: | 2 | 2003
2003
2003 | 0710 | | | P 200 | | | _ | 2001:
2002: | | | |
| | W: | CO,
GM,
LS,
PL,
UA,
RU,
GH,
CH, | CR,
HR,
LT,
PT,
UG,
TJ,
GM,
CY,
SE, | CU,
HU,
LU,
RO,
US,
TM
KE,
CZ, | CZ,
ID,
LV,
RU,
UZ,
LS,
DE,
SK, | DE,
IL,
MA,
SC,
VC,
MW,
DK,
TR, | DK,
IN,
MD,
SD,
VN,
MZ,
EE, | DM,
IS,
MG,
SE,
YU,
SD,
ES, | DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
CF, | EC,
KE,
MN,
SK,
ZM,
SZ,
FR,
CG, | EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CI, | ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CM, | FI,
KR,
MZ,
TM,
AZ,
ZM,
IE,
GA, | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IT,
GN, | GD,
LC,
NZ,
TR,
KG,
AT,
LU,
GQ, | GE,
LK,
OM,
TT,
KZ,
BE,
MC, | GH,
LR,
PH,
TZ,
MD, |

JP 2001-395032 A 20011226 JP 2001-395033 A 20011226

PATENT FAMILY INFORMATION:

FAN 2003:525400

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------------|----------|-----------------|----------|
| | | | | | |
| PI | JP 2003192660 | A2 | 20030709 | JP 2001-395033 | 20011226 |
| | WO 2003055848 | A2 | 20030710 | WO 2002-EP14216 | 20021213 |
| | WO 2003055848 | A 3 | 20031023 | | |

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
```

JP 2001-395032 A 20011226 JP 2001-395033 A 20011226

OS MARPAT 139:79171

GI

AB The phenylurea derivs. I (X = Ph, benzyl, pyridyl, carbazolyl, fluorenyl,thienyl, pyrimidyl benzodioxolyl, indazolyl, quinolyl, naphthyl, or naphthyl-C1-6 alkyl, among them, (hetero)arom. group is optionally substituted with R1, R2, R3; R1, R2, R3 = H, halo, C1-6 alkyl, C1-6 haloalkyl, NO2, cyano, C1-6 alkoxy, OH, piperidino, furyl, thienyl, benzyloxy, anilino, C1-6 alkylcarbamoyl, etc.), their tautomers, their stereoisomers, or their salts are claimed. Also claimed are pharmaceuticals contg. I, their tautomers, their stereoisomers, or their salts for prophylaxis and/or treatment of urge incontinence, overactive bladder, chronic pain, neuropathic pain, postoperative pain, rheumatoid arthritis pain, neuralgia, neuropathies, hyperesthesia, nerve injury, ischemia, neurodegeneration, stroke, incontinence, inflammatory disorders, etc. N-(3,4-Dichlorophenyl)-N'-[2-(2-hydroxyethyl)phenyl]urea, prepd. from 2-H2NC6H4CH2CH2OH and 3,4-Cl2C6H3NCO, inhibited capsaicin-induced Ca2+ influx into CHO cells expressing human VR1 receptors at IC50 .ltoreq.0.1 .mu.M.

- L3 ANSWER 6 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:492185 CAPLUS
- DN 139:69254
- TI Preparation of 4-(2,4-dioxothiazolidin-5-ylmethyl)biphenyl derivatives as new ligand activators of PPAR.gamma. receptors for use in human medicine and in cosmetics
- IN Bernardon, Jean Michel; Clary, Laurence
- PA Galderma Research & Development, Fr.
- SO Fr. Demande, 50 pp.

```
CODEN: FRXXBL
DT
     Patent
LΑ
     French
FAN.CNT 2
     PATENT NO. KIND DATE APPLICATION NO. DATE
     FR 2833949 Al 20030627 FR 2001-16750 20011221 WO 2003055867 Al 20030710 WO 2002-FR4232 20021209
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
              MR, NE, SN, TD, TG
                                               FR 2001-16750 A 20011221
     US 2003134885
                        A1
                              20030717
                                               US 2002-326054 20021223
                                               FR 2001-16750 A 20011221
                                               US 2002-351425PP 20020128
                                               FR 2002-2647 A 20020301
PATENT FAMILY INFORMATION:
FAN 2003:551189
     PATENT NO.
                       KIND DATE
                                         APPLICATION NO. DATE
     US 2003134885 A1 20030717
                                             ______
                                            US 2002-326054 20021223
                                              FR 2001-16750 A 20011221
                                              US 2002-351425PP 20020128
                                              FR 2002-2647 A 20020301
     FR 2833949 A1
FR 2836683 A1
                              20030627
                                            FR 2001-16750 20011221
FR 2002-2647 20020301
                        A1 20030905
     MARPAT 139:69254
OS
GΙ
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

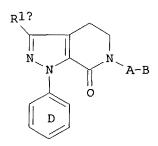
The title compds. [I; R1 = II, CH2CHR6COR5; R2, R3 = H, alkyl, aryl, etc.; X = CH2NR8CO, NR8CONR9, NR8COCH2, NR8CH2CO; R4 = (un)substituted Ph, CH2Ph, thienyl, etc.; R5 = OH, alkoxy; R6 = alkyl, alkoxy, thioxy, aryloxy, etc.; R8 = H, alkyl; R9 = H, alkyl], useful in pharmaceutical compns. intended for a use in medicine human or veterinary (in dermatol., in the field of the cardiovascular diseases, the immunizing diseases and/or the diseases related to the metab. of the lipids), or in cosmetic compns., were prepd. and formulated. Thus, reacting 5-(3'-methylaminomethylbiphenyl-4-ylmethyl)thiazolidine-2,4-dione (multi-step synthesis given) with cyclopentanepropionyl chloride afforded 25% III which showed Kd of 250.0 nM against PPAR.gamma. receptor binding.

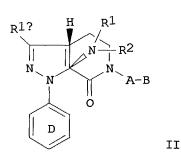
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

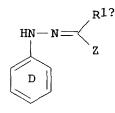
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

```
AN
     2003:472339 CAPLUS
DN
     139:53014
ΤI
     Synthesis of 4,5-dihydro-pyrazolo[3,4-c]pyrid-2-ones
     Zhou, Jiacheng; Oh, Lynette M.; Ma, Philip; Li, Hui-yin
IN
PA
     Bristol-Myers Squibb Company, USA
SO
     PCT Int. Appl., 143 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                           DATE
                                           APPLICATION NO.
                                                            DATE
                      ____
                           _____
                                           _____
PΙ
     WO 2003049681
                            20030619
                                           WO 2002-US38559 20021203
                      A2
     WO 2003049681
                     A3
                           20030918
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
                                           US 2001-339085PP 20011210
     US 2003181466
                      A1
                            20030925
                                           US 2002-308741
                                                            20021203
                                           US 2001-339085PP 20011210
OS
    MARPAT 139:53014
GΙ
```







Ι

III

$$R^{1-N}$$
 R^{2}
 R^{2}

AB A novel process and intermediates thereof for making 4,5-dihydro-pyrazolo[3,4-c]pyrid-2-ones (shown as I; variables defined below; e.g. 1-(4-methoxyphenyl)-7-oxo-6-[4-(2-oxopiperidin-1-yl)phenyl]-4,5,6,7-

tetrahydro-1H-pyrazolo[3,4-c]pyridine-3-carboxylic acid amide) from appropriate Ph hydrazines is described. These compds. are useful as factor Xa inhibitors (no data). I are made from II using an acid, e.g. trifluoroacetic, sulfuric, nitric, hydrochloric. For example, 1-(3-cyano-4-fluorophenyl)-3-trifluoromethyl-6-(4-iodophenyl)-1,4,5,6tetrahydro-7H-pyrazolo[3,4-c]pyridin-7-one was prepd. (95% yield) from 1-(3-cyano-4-fluorophenyl)-3-trifluoromethyl-6-(4-iodophenyl)-8-morpholino-1,4,5,6,8,9-hexahydro-7H-pyrazolo[3,4-c]pyridin-7-one (1.0 mmol) in CH2Cl2 on treatment with CF3CO2H (2.0 mL). II are made from III and IV in the presence of base (e.g. triethylamine, diisopropylethylamine, and N-methylmorpholine). For example, 1-(3-cyano-4-fluorophenyl)-3trifluoromethyl-6-(4-iodophenyl)-8-morpholino-1,4,5,6,8,9-hexahydro-7Hpyrazolo[3,4-c]pyridin-7-one was prepd. (65% yield) from 2,2-trifluoro-N-(3-cyano-4-fluorophenyl)ethanehydrazonoyl mesylate (4.0 mmol) and N-(4-iodophenyl)-3-morpholino-5,6-dihydro-2H-pyridin-2-one (4.0 mmol) in toluene (18 mL) in the presence of N-methylmorpholine (16.0 mmol). For I-IV: ring D = 4-chlorophenyl, 4-methoxyphenyl, 2-cyanophenyl, 2-(aminomethy1)phenyl, 2-(PgNHCH2)phenyl, 3-cyanophenyl, 3-(aminomethyl)phenyl, 3-(PgNHCH2)phenyl, 3-cyano-4-fluorophenyl, (3-amino)benz[d]isoxazol-6-yl, and (3-PgNH)benz[d]isoxazol-6-yl (Pg is an amine protecting group). R1 and R2 = C1-6 alkyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, Ph, and benzyl; alternatively, NR1R2 is a 3-8 membered ring consisting of C atoms, N, and 0-1 O atoms; R1a = H, CH3, CH2CH3, CH2CH2CH3, CH2F, CH2Cl, Br, CH2Br, CN, CH2CN, CF3, CH2CF3, CH2OCH3, CO2CH3, CH2CO2CH3, CO2CH2CH3, CH2CO2CH2CH3, CH2SCH3, S(O)CH3, CH2S(O)CH3, S(O)2CH3, CH2S(O)2CH3, C(O)NH2, CH2C(O)NH2, SO2NH2, CH2SO2NH2, pyridin-2-yl, pyridin-3-yl, pyridin-4-yl, pyridin-2-yl N-oxide, pyridin-3-yl N-oxide, pyridin-4-yl N-oxide, imidazol-1-yl, CH2-imidazol-1-yl, 1,2,3,4-tetrazol-1-yl, 1,2,3,4-tetrazol-5-yl, CH2-1,2,3,4-tetrazol-1-yl, and CH2-1,2,3,4-tetrazol-5-yl, provided that R1a forms other than an N-halo, N-N, N-S, N-O, or N-CN bond. A = Ph substituted with 0-1 R4, pyridyl substituted with 0-1 R4, and pyrimidyl substituted with 0-1 R4; B = B1, Cl, Br, I, OMs, OTs, OSO2Ph, CH2Br, CH2OH, and CHO; alternatively, A-B is H; B1 is Y or X-Y; X = C1-4alkylene, -CR2(CHR2R2b)(CH2)t-, -C(0)-, -CR2(OR2)-, -CR2(SR2)-, -C(O)CR2R2a-, -CR2R2aC(O), -S(O)p-, - S(O)pCR2R2a-, -CR2R2aS(O)p-, -S(O)2NR2-, -NR2S(O)2-, -NR2S(O)2CR2R2a-, -CR2R2aS(O)2NR2-, -NR2S(O)2NR2-, -C(0)NR2-, -NR2C(0)-, -C(0)NR2CR2R2a-, -NR2C(0)CR2R2a-, -CR2R2aC(0)NR2-, -CR2R2aNR2C(0)-, -NR2C(0)0-, -OC(0)NR2-, -NR2C(0)NR2-, -NR2-, -NR2CR2R2a-, -CR2R2aNR2-, 0, -CR2R2aO-, and -OCR2R2a-. Y = C3-10 carbocycle substituted with 0-2 R4a, and 5-10 membered heterocycle contg. = 1-4heteroatoms N, O, and S, substituted with 0-2 R4a; addnl. details are given in the claims. For III: Z = Cl, Br, I, OSO2Me, OSO2Ph, OSO2C6H4Me-p.

```
L3 ANSWER 8 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

- TI Preparation of indole-2-carboxamides as factor Xa inhibitors
- IN Nazare, Marc; Essrich, Melanie; Will, David William; Matter, Hans; Ritter, Kurt; Wehner, Volkmar
- PA Aventis Pharma Deutschland Gmbh, Germany
- SO Eur. Pat. Appl., 90 pp. CODEN: EPXXDW
- DT Patent
- LA English

FAN.CNT 1

AN 2003:414216 CAPLUS

DN 139:6766

GI

| | PATENT | NO. | KIN | | | | | | | ON N | | DATE | | | |
|----|---------|----------|-----|---------|------|-----|-----|-------|------|------|------|------|------|------|------|
| PI | | 733 | A1 | 2003 | | | E | P 20 | 01-1 | 2780 | 9 | | | | |
| | R: | AT, BE, | | | | | | | | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, SI, | LT, | LV, FI, | RO, | MK, | CY, | AL, | TR | | | | | | |
| | WO 2003 | 044014 | A1 | 2003 | 0530 | | W | O 20 | 02-E | P125 | 00 | 2002 | 1108 | | |
| | W: | AE, AG, | AL, | AM, AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CO, CR, | CU, | CZ, DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | | ID, IL, | | | | | | | | | | | |
| | | | | LV, MA, | | | | | | | | | | | |
| | | | | RU, SD, | | | | | | | | | | | |
| | | | | VC, VN, | | | | | | | | | | | |
| | | TJ, TM | • | | , | | | , | , | , | , | 2, | , | 112, | 2.0, |
| | RW: | GH, GM, | KE, | LS, MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | BG, |
| | | | | DE, DK, | | | | | | | | | | | |
| | | | | TR, BF, | | | | | | | | | | | |
| | | NE, SN, | | | • | • | , | • | • | • | • | _, | ., | , | , |
| | | | • | | | | E | P 20 | 01-1 | 2780 | 9 A | 2001 | 1122 | | |
| | US 2003 | 199689 | A1 | 2003 | 1023 | | US | 5 200 | 02-3 | 0139 | 7 | 2002 | 1121 | | |
| | | | | | | | | | | | | 2001 | | | |
| os | MARPAT | 139:6766 | | | | | | | | | • •• | | | | |
| os | MARPAT | 139:6766 | | | | | | | | | | | | | |

$$R^{5}$$
 R^{6}
 R^{7}
 N
 $N-R^{2}-V-G-M$
 R^{3}
 Q
 R^{1}

AB The title compds. [I; R0 = (un) substituted monocyclic or bicyclic 6-14 membered aryl, monocyclic or bicyclic 5-14 membered heteroaryl, etc.; Q = a bond, CO, SO2, etc.; R1 = H, alkyl; R2 = a bond, alkylene; R1 and R2 together with the N atom and V to which they are bonded form (un) substituted 5-7 membered cyclic group contg. up to 1-4 heteroatoms chosen from N, S or O; V = (un) substituted 3-7 membered cyclic residue contg. up to 1-4 heteroatoms chosen from N, S or O, 6-14 membered aryl,

II

Ι

etc.; G = a bond, (CH2)m, (CH2)mO(CH2)n, etc.; n , m = 0-6; M = H, alkyl, aryl, etc.; R3-R7 = H, halo, alkyl, etc.] which exhibit a strong antithrombotic effect and are suitable, for example, for the therapy and prophylaxis of cardiovascular disorders like thromboembolic diseases or restenoses, were prepd. Thus, amidation of 1-[5-(5-chlorothiophen-2yl)isoxazol-3-ylmethyl]-1H-indole-2-carboxylic acid with 1-isopropylpiperidin-4-ylamine. HCl (prepns. given) in the presence of BOP-Cl, Et3N and DCM afforded II which showed Ki of 0.0033 .mu.M against factor Xa. The compds. I are reversible inhibitors of the blood clotting enzymes factor Xa (FXa) and/or factor VIIa (FVIIa), and can in general be applied in conditions in which an undesired activity of factor Xa and/or factor VIIa is present or for the cure or prevention of which an inhibition of factor Xa and/or factor VIIa is intended. The invention furthermore relates to processes for the prepn. of compds. I, their use, in particular as active ingredients in pharmaceuticals, and pharmaceutical prepns. comprising them.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L3 ANSWER 9 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2003:301073 CAPLUS

DN 138:321300

TI Preparation of cyclic sulfone derivatives as inhibitors of matrix metalloproteinases, aggrecanase and/or TNF-.alpha. converting enzyme (TACE)

IN Duan, Jingwu; Xue, Chu-Biao

PA Bristol-Myers Squibb Company, USA

SO PCT Int. Appl., 115 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| ran. | | TENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON NO | 0. | DATE | | | |
|------|--------|---------------------------|------|-----|-----|-----|------|------|-----|-----|------|------|-------|-----|------|------|-----|-----|
| ΡI | WO | 2003 | 0314 | 31 | A | 1 | 2003 | 0417 | | W | o 20 | 02-U | S321 | 68 | 2002 | 1007 | | |
| | | W: | ΑE, | AG, | AL, | ΑM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, H
LS, L'
PI. P' | | | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | ΚP, | KR, | KZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ΤJ, | TM, | TN, | TR, | TT, | TZ, |
| | | PL, PI
UA, UG | | | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | KZ, | MD, | RU, |
| | | | ТJ, | TM | | | | | | | | | | | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | BG, |
| | | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FΙ, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, |
| | PT, SI | | | | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, |
| | | | NE, | SN, | TD, | TG | | | | | | | | | | | | |
| | | | | | | | | | | U: | s 20 | 01-3 | 2781 | 6PP | 2001 | 1009 | | |
| | US | 2003 | 1490 | 31 | A. | 1 | 2003 | 0807 | | U; | s 20 | 02-2 | 6587 | 6 | 2002 | 1007 | | |
| | | | | | | | | | | U: | S 20 | 01-3 | 2781 | 6PP | 2001 | 1009 | | |

OS MARPAT 138:321300

GΙ

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The present formula application describes novel cyclic sulfone derivs. AΒ (shown as I; variables defined below; e.g. N-hydroxy-2-[4-isopropyl-2-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-1,1-dioxido-2thiomorpholinyl]acetamide (shown as II)) or pharmaceutically acceptable salt or prodrug forms thereof, which are useful as inhibitors of matrix metalloproteinases (MMP), TNF-.alpha. converting enzyme (TACE), aggrecanase, or a combination thereof. Although the methods of prepn. are not claimed, 1 example prepn. is included and 19 specific I are mentioned in the claims. For I: A = COR5, CO2H, CO2R6, C(O)NHOH, C(O)NHOR5, C(O)NHOR6, NHRa, N(OH)COR5, N(OH)CHO, SH, CH2SH, S(O)(:NH)Ra, S(:NH)2Ra, SC(O)Ra, PO(OH)2, and PO(OH)NHRa. Ring B, including the shown C and sulfonyl groups, is a 4-8 membered heterocycle consisting of C atoms and, in addn. to the sulfonyl group shown, 0-2 heteroatoms = 0, N, NR10, and S(O)p, provided that ring B contains other than a S-S, O-O, or S-O bond; ring B consists of 0-1 double bonds and is substituted with 0-2 Rb. X is absent or is CR3R4; Ua is absent or = 0, NRa1, C(0), C(0)0, OC(0), C(0) NRal, NRalC(0), OC(0)O, OC(0) NRal, NRalC(0)O, NRalC(0) NRal, S(0)p, S(O)pNRa1, NRa1S(O)p, and NRa1SO2NRa1; Xa is absent or = C1-4 alkylene, C2-4 alkenylene, and C2-4 alkynylene; Ya is absent or = 0, NRa1, S(0)p, and C(0); provided that Ua-Xa-Ya form other than a bond or O; Za is a C3-13 carbocycle substituted with 0-5 Rc or a 5-14 membered heterocycle consisting of C atoms and 1-4 heteroatoms N, O, and S(O)p, and substituted with 0-5 Rc; provided that Ua, Ya and Za do not combine to form a N-N, N-O, O-N, O-O, S(O)p-O, O-S(O)p or S(O)p-S(O)p group. R1 = H, C1-6 alkyl substituted with 0-1 Rb, C2-6 alkenyl substituted with 0-1 Rb, and C2-6 alkynyl substituted with 0-1 Rb; R2 = Q, C1-6 alkylene-Q, C2-6 alkenylene-Q, C2-6 alkynylene-Q, (CRaRa1)r10(CRaRa1)r-Q, (CRaRa1)r1NRa(CRaRa1)r-Q, (CRaRa1)r1C(O)(CRaRa1)r-Q, (CRaRa1)r1C(O)O(CRaRa1)r-Q, (CRaRa1)r1OC(O)(CRaRa1)r-Q, (CRaRal)r1C(O)NRaRal, (CRaRal)r1C(O)NRa(CRaRal)r-Q, (CRaRa1) r1NRaC(0) (CRaRa1) r-Q, (CRaRa1) r1OC(0) O (CRaRa1) r-Q,(CRaRa1) r10C(0) NRa(CRaRa1) r-Q (CRaRa1) r1NRaC(0) O(CRaRa1) r-Q, (CRaRa1)rlNRaC(O)NRa(CRaRa1)r-Q, (CRaRa1)rlS(O)p(CRaRa1)r-Q, (CRaRa1)r1SO2NRa(CRaRa1)r-Q, (CRaRa1)r1NRaSO2(CRaRa1)r-Q, and (CRaRa1)rlNRaSO2NRa(CRaRa1)r-Q; Q = H, a C3-13 carbocycle substituted with 0-5 Rd, and a 5-14 membered heterocycle consisting of C atoms and 1-4 heteroatoms N, O, and S(O)p, and substituted with 0-5 Rd; alternatively, R1 and R2, together with the C atom to which they are attached, combine to form a 3-10 membered heterocyclic ring consisting of C atoms and 0-2 ring heteroatoms = O, N, NR10, and S(O)p, and substituted with O-3 Rc;. Rb = C1-6 alkyl substituted with 0-1 Rc1, ORa, Cl, F, Br, I, O, CN, NO2, NRaRa1, C(O)Ra, C (O)ORa, C(O)NRaRa1, C(S)NRaRa1, NRaC(O)NRaRa1, OC(O)NRaRa1, NRaC(O)ORa, S(O)2NRaRa1, NRaS(O)2Ra3, NRaS(O)2NRaRa1, OS(O)2NRaRa1, NRaS(O)2Ra3, S(O)pRa3, CF3, CF2CF3, CHF2, CH2F, and phenyl; q = 0-2; addnl. details are given in the claims. A no. of I exhibit Ki's of <10 .mu.M in a metalloproteinase assay (specific compds. not mentioned).

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 10 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:300876 CAPLUS
- DN 138:321573
- TI Preparation of p-aminobenzoic acid amino acid derivatives as integrin antagonists
- IN Lehmann, Thomas; Albers, Markus; Roelle, Thomas; Mueller, Gerhard; Hessler, Gerhard; Tajimi, Masaomi; Ziegelbauer, Karl; Okigami, Hiromi;

Bacon, Kevin; Hasegawa, Haruki

Bayer Aktiengesellschaft, Germany PA

PCT Int. Appl., 107 pp. SO

CODEN: PIXXD2

DTPatent T.A English

| 1111 | TIT! | , |
|------|------|---|
| FAN. | CNT | 1 |

| | PATENT NO. | | | | KI | ND : | DATE | | | A. | | | | ٥. | DATE | | | |
|----|------------|------|------|-----|-----|------|------|------|-----|-----|-----|----------|-----|-----|------|------|-----|-----|
| PI | WO | 2003 | 0308 | 89 | A | 1 : | 2003 | 0417 | | M. | |
02-Е | | 63 | 2002 | 0920 | | |
| | | W: | ΑE, | AG, | ΑL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | ΗU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NZ, | OM, | PH, |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | ΤZ, |
| | | | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, |
| | | | RU, | ТJ, | TM | | | | | | | | | | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | BG, |
| | | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, |
| | | | PT, | SE, | SK, | TR, | BF, | ΒJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, |
| | | | NE, | SN, | TD, | ΤG | | | | | | | | | | | | |

GB 2001-23765 A 20011003

MARPAT 138:321573 OS

GΙ

$$R^{1}$$
 R^{2}
 R^{4}
 R^{5}
 R^{5}
 R^{7}
 R^{6}
 R^{6}
 R^{7}
 R^{6}

AB The invention relates to p-aminobenzoic acid derivs. I or their pharmaceutically-acceptable salts as .alpha.4.beta.1, .alpha.4.beta.7, and/or .alpha.9.beta.1 integrin antagonists for the prodn. of pharmaceutical compns. suitable for the inhibition or prevention of cell adhesion and cell-adhesion mediated disorders. Thus, compd. II was prepd. by the solid-phase method and showed IC50 .ltoreq. 0.5 .mu.M in the VCAM-1 assay.

Ι

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

Patel

II

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:42250 CAPLUS

DN 138:106712

TI Preparation of pyrazine-2-carboxamides as glycogen synthase kinase-3 (GSK3) inhibitors

IN Berg, Stefan; Hellberg, Sven

PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

| FAN. | | | NTO. | | KI | MTD. | DATE | | | 71. | חחד דתם | מאחד. | ONT N | _ | DATE | | | | |
|------|--------|----------------------------|------|-----|-----|------|--------------|-----|-----|-----|-----------|-------|---------|-----|------|-----|-----|-----|--|
| | PA. | CENT : | | | VT: | U D | DAIL | | | A. |
55DT/ | CALL | OI4 I44 | J. | DATE | | | | |
| PI | | 2003
2003 | | - | | _ | 2003
2003 | | | W | 20 | 02-s | E133 | 9 | 2002 | | | | |
| | | W: | ΑE, | AG, | ΑL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | |
| | | GM, HR, HU,
LS, LT, LU, | | | | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KΡ, | KR, | ΚZ, | LC, | LK, | LR, | |
| | | | LS, | LT, | LU, | LV, | ΜA, | MD, | MG, | MK, | MN, | MW, | ΜX, | ΜZ, | NO, | NZ, | OM, | PH, | |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, | |
| | | | UA, | ŪG, | US, | UΖ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | |
| | | | ТJ, | TM | | | | | | | | | | | | | | | |
| | | RW: GH, GM, KE, | | | | LS, | ΜW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | ΑT, | BE, | BG, | |
| | | CH, CY, CZ, DE | | | | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | ΝL, | |
| | PT, SE | | | SE, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | |
| | | | NE, | SN, | TD, | ΤG | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

SE 2001-2439 A 20010705

OS MARPAT 138:106712

GΙ

$$\begin{array}{c|c} Z & NH_2 \\ \hline \\ R & Y \\ \hline \\ [R3]_n & Q & [R4]_m \\ \hline \\ \end{array}$$

$$\begin{array}{c|c}
N & NH2 \\
N & N \\
N & N
\end{array}$$

$$\begin{array}{c|c}
N & NH2 \\
N & N
\end{array}$$

$$\begin{array}{c|c}
N & NH2 \\
N & N
\end{array}$$

$$\begin{array}{c|c}
N & NH2 \\
N & N
\end{array}$$

$$\begin{array}{c|c}
N & NH2 \\
N & N
\end{array}$$

AB The title compds. [I; Z = CH, N; Y = CONR5, NR5CO, SO2NR5, etc.; X = CH,

N; P = Ph or 5-6 membered heteroaryl which may optionally be fused with 5-6 membered (un)satd. ring contg. one or more atoms selected from C, N, O or S; Q = Ph or 5-6 membered heteroaryl contg. one or more heteroatoms selected from N, O or S of which at least one atom is selected from N atom; R = CHO, OCH2F, OCHF2, OCF3, etc.; R3, R4 = halo, NO2, CHO, etc.; n, m = 0-4], useful in the prevention and/or treatment of conditions assocd. with glycogen synthase kinase-3, were prepd. and formulated. Thus, coupling 3-amino-6-bromo-N-(pyridin-3-yl)pyrazine-2-carboxamide with 4-(pyrrolidin-1-ylsulfonyl)phenylboronic acid (prepns. given) in the presence of Pd(dppf)Cl2 and Na2CO3 in dimethoxyethane afforded 93% the carboxamide II. Typical Ki values for the compds. I are in the range of about 0.001 to about 10,000 nM.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L3 ANSWER 12 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2003:22869 CAPLUS

DN 138:89806

TI Preparation of arylpyrazoles as soluble epoxide hydrolase inhibitors for treatment of cardiovascular disease.

IN Ingraham, Richard H.; Proudfoot, John R.

PA Boehringer Ingelheim Pharmaceuticals Inc., USA

SO PCT Int. Appl., 44 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | O11 1 | _ | | | | | | | | | | | | | | | | | |
|----|-------|------|------|-----|-----|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|----|
| | PAT | CENT | NO. | | KI | ND | DATE | | | A. | PPLI | CATI | ON N | 0. | DATE | | | | |
| | | | | | | | | | | | | | | | | | | | |
| ΡI | WO | 2003 | 0025 | 55 | A. | 1 | 2003 | 0109 | | M | 20 | 02-U | S187 | 52 | 2002 | 0614 | | | |
| | | w: | ΑE, | AG, | AL, | ΑM, | ΑT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | |
| | | | GM, | HR, | ΗU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NZ, | OM, | PH, | |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, | |
| | | | UA, | UG, | UΖ, | VN, | ΥU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | ΰĠ, | ZM, | ZW, | AT, | BE, | CH, | |
| | | | CY, | DE, | DK, | ES, | FΙ, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | ΝE, | SN, | TD, | ТG | |
| | | | | | | | | | | U: | 5 20 | 01-3 | 0206 | 6PP | 2001 | 0629 | | | |
| | US | 2003 | 0229 | 29 | A. | 1 | 2003 | 0130 | | U. | 5 20 | 02-1 | 7245 | 7 | 2002 | 0614 | | | |
| | | | | | | | | | | U: | S 20 | 01-3 | 0206 | 6PP | 2001 | 0629 | | | |

OS MARPAT 138:89806

GI

$$\begin{array}{c|c}
R^{2} & & \\
R^{2} & & \\
N & & \\
R^{8} & & 1
\end{array}$$

AB A method of treating cardiovascular disease comprises administration of title compds. [I; R1, R3 = CF3, halo, cyano, alkyl, alkenyl, alkynyl,

(substituted) cycloalkyl, heterocyclyl, etc.; R2 = H, halo, Me; L = NHCO, NHCS, NH, NHCH2, NHCOCO, etc.; R4 = (substituted) alkyl, alkoxy, alkylthio, alkylamino, alkoxyalkyl, alkylthioalkyl, carbocyclyl, heterocyclyl, etc.; R8 = H, NH2] (no data). Thus, 2-chloronicotinic acid in MeCN was treated with EDC and then with 1-(4-aminophenyl)-3-(3-pyridyl)-5-trifluoromethylpyrazole under ice cooling followed by stirring for 1 h to give I (R1 = 3-pyridyl; R2, R8 = H; R3 = CF3; L = NHCO; R4 = 2-chloropyridin-3-yl).

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 13 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN L3

AN 2002:695939 CAPLUS

DN 137:232452

TIPreparation of benzamidines having antiinflammatory and immunosuppressive

IN Makovec, Francesco; Zanzola, Simona; Artusi, Roberto; Rovati, Lucio Claudio

PA Rotta Research Laboratorium S.p.A., Italy

PCT Int. Appl., 43 pp. CODEN: PIXXD2

DTPatent

LA English

| FAN. | CNT 1 | | | | | | | | | | | | | | | | | |
|------|-------|--------------------|-----|-----|--------------|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|
| | PATE | ENT N | 10. | | KI | ND | DATE | | | A | PPLI | CATI | ON N | 0. | DATE | | | |
| PI | WO 2 | 20020 | 704 | 58 | A | 2 | 2002 | 0912 | | W | 0 20 | 02-E | P120 | 1 | 2002 | 0206 | | |
| | WO 2 | 20020 | 704 | 58 | Α | 3 | 2003 | 0904 | | | | | | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | ΗU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | ΝZ, | OM, | PH, |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ΤJ, | TM, | TN, | TR, | TT, | TZ, |
| | | PL, PT,
UA, UG, | | | | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, |
| | | | TM | | | | | | | | | | | | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | CH, |
| | | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, |
| | | | BF, | ΒJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | ΝE, | SN, | TD, | TG |
| | | | | | | | | | | I. | Г 20 | 01-T | 0110 | Α | 2001 | 0208 | | |
| | EP 1 | .3638 | 75 | | \mathbf{A} | 2 | 2003 | 1126 | | E. | P 20 | 02-7 | 1809 | 6 | 2002 | 0206 | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR | | | | | | |
| | | | | | | | | | | ľ | r 20 | 01-T | 0110 | Α | 2001 | 0208 | | |
| | | | | | | | | | | W | O 20 | 02-E | P120 | 1 W | 2002 | 0206 | | |

OS CASREACT 137:232452; MARPAT 137:232452

GI

$$(R^2R^3R^4C)$$
 n $\stackrel{A}{\underset{H}{\longrightarrow}}$ $\stackrel{N}{\underset{H}{\longrightarrow}}$ $\stackrel{R^5}{\underset{H}{\longrightarrow}}$ $\stackrel{R^1}{\underset{NH}{\longrightarrow}}$

```
Title compds. [I; A = carboxamide, thiocarboxamide, carbonyl; R1 = alkyl,
AB
     amino, optionally substituted with NO2 or Me; R2 = H, alkyl, MeO, EtO,
     PrO, mono-, bi- or tricyclic cycloalkyl having 5-12 C atoms, adamantyl,
     aryl, naphthyl, heterocyclyl optionally substituted with Me, MeO, OH,
     amino, halo; R3, R4 = H, alkyl; R5 = 1-2 of H, Me, MeO, OH; n = 0-6; the
     amidine groups is in the para or meta position relative to the ANH group],
     were prepd. Thus, di-N-(4-aminophenyl)-N'-pentylthiourea, Et3N, Me
     acetimidate hydrochloride were stirred 24 h in THF to give
     N-[4-(n-acetamidine)Ph]-N'-pentylthiourea. The latter inhibited NO prodn.
     in rabbit joint chondrocytes with IC50 = 6.6 .mu.M.
```

```
ANSWER 14 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

2002:695933 CAPLUS

DN 137:232445

Preparation of aminodicarboxylic acids for the treatment of cardiovascular

IN Alonso-Alija, Cristina; Haerter, Michael; Hahn, Michael; Pernerstorfer, Josef; Weigand, Stefan; Stasch, Johannes-Peter; Wunder, Frank

Bayer Aktiengesellschaft, Germany

PCT Int. Appl., 162 pp. SO CODEN: PIXXD2

Patent

DTLAGerman

FAN.CNT 1

```
PATENT NO.
                    KIND DATE
                                       APPLICATION NO. DATE
                    ____
                                        ______
                          20020912
PΙ
    WO 2002070462
                    A1
                                       WO 2002-EP1941 20020225
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                        DE 2001-10110749A 20010307
                          20020912
                                         DE 2001-10110749 20010307
    DE 10110749
                     A1
    EP 1368300
                    A1
                          20031210
                                        EP 2002-703602 20020225
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                        DE 2001-10110749A 20010307
                                         WO 2002-EP1941 W 20020225
```

MARPAT 137:232445 OS

GΙ

Title compds. I [V = absent, O, COO, etc.; Q = absent, (un) substituted AΒ alkylene, alkendiyl, etc; Y = H, NR8R9, (un) substituted aryl, etc.; W = (un) substituted alkylene, alkendiyl; U = (un) substituted alkyl; A = (un) substituted aryl, heteroarom. contq. 1-3 heteroatoms, e.g., S, N, O; X

<12/10/2003> Patel

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

```
= (un)substituted alkylene, alkendiyl, aryl, etc.; R1 = tetrazolyl, COOR30, CONR31R32; R2 = tetrazolyl, COOR24, CONR25R26, R25 and R26 form 5 or 6-membered ring which can be interrupted by O or N; R3 = aryl, SR17, SO2R17, etc.; R8, R9, R17 = H, (un)substituted alkyl, alkenyl, etc.; R24 = H, (un)substituted alkyl, cycloalkyl; R25, R26 = H, (un)substituted alkyl, cycloalkyl, etc.; R30 = H, (un)substituted alkyl, cycloalkyl; R31, R32 = H, (un)substituted alkyl, cycloalkyl, etc.; m = 1-4; n = 1-2] and their pharmaceutically acceptable salts were prepd. For example, Pd(Ph3)2Cl2 mediated coupling of aryl bromide II, prepd. from ethyl-2-hydroxy-5-trifluoromethoxybenzoate in 8-steps, with 4-chlorophenyl boronic acid, followed by ester hydrolysis afforded aminodicarboxylate III. Compds. I stimulated the activation of sol. guanylate cyclase (sGC) independent of the heme group (no data).
```

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L3 ANSWER 15 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2002:675840 CAPLUS

DN 137:226590

TI Use of epothilone derivatives and a signal transduction inhibitor for the treatment of cancer

IN Buchdunger, Elisabeth; Heldin, Carl-Henrik; Oestman, Arne; Pietras, Kristian; O'Reilly, Terence; Rothermel, John David; Traxler, Peter; Wartmann, Markus

PA Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.; Brandt, Ralf

SO PCT Int. Appl., 24 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

```
PATENT NO.
                   KIND DATE
                                      APPLICATION NO. DATE
                                        A2 20020906
PΙ
    WO 2002067941
                                      WO 2002-EP2049 20020226
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU,
            LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG,
            SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VN, YU, ZA, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE, TR
                                        GB 2001-4840
                                                     A 20010227
                                        US 2001-339040PP 20011030
    NO 2003003769
                     Α
                          20030825
                                        NO 2003-3769
                                                        20030825
                                        GB 2001-4840
                                                      A 20010227
                                        US 2001-339040PP 20011030
                                        WO 2002-EP2049 W 20020226
```

OS MARPAT 137:226590

GI

$$R^{7}$$
 R^{6} R^{7} R^{6} R^{7} R^{6} R^{7} R^{6} R^{7} R^{7} R^{8} R^{7} R^{7} R^{7} R^{8} R^{8} R^{8} R^{8} R^{8} R^{9} R^{9

AΒ The present invention relates to a combination which comprises (a) a signal transduction inhibitor selected from a PDGF (platelet-derived growth factor) receptor tyrosine kinase inhibitor which is a N-phenyl-2-pyrimidine-amine deriv. such as I [R1 = pyrazinyl, pyrrolyl, substituted phenyl; R2, R3 = H, alkyl; R4, R5, R6, R7, R8 = nitro, alkoxy, -N(R9)-C(=X)-(Y)n-R10; R9=H, alkyl; X=oxo, thio, imino, N-alkylamino, hydroximino; Y = 0, NH; n = 0, 1; R10 = alkyl, aryl, cycloalkyl, heterocycle], and an active ingredient which decreases the activity of the epidermal growth factor (EGF) and (b) an epothilone deriv. such as II [A = O, NRn; Rn = H, alkyl; R = H, alkyl; Z = O, a bond], and optionally at least one pharmaceutically acceptable carrier for simultaneous, sep. or sequential use, in particular, for the delay of progression or treatment of a proliferative disease. The invention also discloses a com. package comprising such a combination as a combined prepn. and to a method of treatment of a warm-blooded animal, esp. human.

```
L3
     ANSWER 16 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

2002:594872 CAPLUS AN

DN 137:155180

Preparation of tripeptides as hepatitis C inhibitors TΙ

Campbell, Jeffrey Allen; Good, Andrew IN

Bristol-Myers Squibb Company, USA PA

PCT Int. Appl., 240 pp. SO

CODEN: PIXXD2

DTPatent

LΑ English

| FAN. | CNT | 1 | | | | | | | | | | | | | | | | | | |
|------|---------------|------------|------------|-----|-----|-----------|----------|------|-----|---------------------------|------|------|------|-----|------|------|-----|-----|--|--|
| | PATENT NO. | | | | | KIND DATE | | | | APPLICATION NO. | | | | | | DATE | | | | |
| PI | WO | 2002060926 | | | A2 | | 20020808 | | | | | | | | | | | | | |
| | WO | 2002 | 2002060926 | | | 3 | 20030313 | | | | | | | | | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | | |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | PH, | PL, | | |
| | | | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | ŪĠ, | | |
| | | | UZ, | VN, | ΥU, | ZA, | Z₩, | AM, | ΑZ, | BY, | KG, | KZ, | MD, | RU, | ТJ, | MT | | | | |
| | | RW: | GH, | GM, | KΕ, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | ŪG, | ZM, | ZW, | AT, | BE, | CH, | | |
| | | | CY, | DE, | DK, | ES, | FΙ, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | | |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | |
| | | | | | | | | | | US 2000-249968PP 20001120 | | | | | | | | | | |
| | US | 2002111313 | | | Α | 1 | 2002 | 0815 | | US 2001-1850 20011120 | | | | | | | | | | |
| | | | | | | | | | | U. | s 20 | 00-2 | 4996 | 8PP | 2000 | 1120 | | | | |
| | \mathbf{EP} | 1337 | 550 | | A | 2 | 2003 | 0827 | | EP 2001-997024 20011120 | | | | | | | | | | |
| | | R: | AT. | BE. | CH. | DE, | DK, | ES, | FR. | GB, | GR, | IT, | LI, | LU, | NL. | SE, | MC, | PT, | | |

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2000-249968PP 20001120 WO 2001-US45145W 20011120

OS MARPAT 137:155180

GI

Tripeptides I [R1 = (un)substituted alkyl, cycloalkyl, alkylcycloalkyl, or aryl; m = 1 or 2; X = CH2 or CH2CH2; R2 = H or (un)substituted alkyl, alkenyl, or cycloalkyl; R3 = alkyl, phenylalkyl, alkenyl, (un)substituted cycloalkyl or alkylcycloalkyl CR3 is a cycloalkyl group optionally substituted by alkenyl; Y = H, nitrophenyl, nitropyridyl, or alkyl optionally substituted by cyano, hydroxyl, or cycloalkyl; B = H, alkyl, acyl, carbamoyl, thiocarbamoyl, or a sulfonyl group] were prepd. for the treatment of hepatitis C virus (HCV) infection. Synthetic procedures and biol. test data are given for 141 tripeptides I. Compd. I (R1 = p-AcNHC6H4, m = 2, X = CH2, R2 = vinyl, R3 = tert-Bu, B = H, Y = tert-butoxycarbonyl) showed IC50 < 0.05 .mu.M for inhibition of HCV NS3/4A protease (BMS strain) and EC50 < 0.5 .mu.M in the HCV replicon cell-based assay.

I

L3 ANSWER 17 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:504777 CAPLUS

DN 137:63180

TI Preparation of carboxamides as telomerase inhibitors

IN Hauel, Norbert; Priepke, Henning; Damm, Klaus; Schnapp, Andreas

PA Boehringer Ingelheim Pharma K.-G., Germany

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002051830 A1 20020704 WO 2001~EP14565 20011212

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,

PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10065043 A1 20020704 DE 2000-10065043A 20001223
US 2002123509 A1 20020905 US 2001-25426 20011219
US 6660764 B2 20031209

DE 2000-10065043A 20001223

OS MARPAT 137:63180

Title compds. AR1C:CR2C(0)NR3B [R1 = H, C1-3 alkyl; R2 = H, F, C1, Br, C1-3 alkyl; R3 = H, C1-5 alkyl; A = (substituted) Ph-condensed chromanyl, chromenyl, 5-6 membered heterocyclyl; B = (substituted) 5-6 membered heteroaryl, Ph, naphthyl], were prepd. Thus, trans-3-(quinolin-6-yl)-N-(2-methoxycarbonylphenyl)but-2-enamide (prepn. given) was stirred with MeOH and 2N NaOH for 2 h at room temp. to give 92% trans-3-(quinolin-6-yl)-N-(2-carboxyphenyl)but-2-enamide. The latter at 5 .mu.M gave >50% inhibition of the telomerase activity.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:479961 CAPLUS

DN **137:41755**

TI Antidiabetic agents containing amine derivatives having benzimidazole or imidazopyridine ring and their other uses

IN Fujita, Takashi; Wada, Kunio; Oguchi, Minoru; Honma, Eiji; Fujiwara, Toshihiko

PA Sankyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 109 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

OS MARPAT 137:41755

GΙ

$$\begin{array}{c|c} R_1^1 & & \\ NW^1 & & \\ R_2^2 & & \\ \end{array}$$

AB Prophylactic and/or therapeutic agents for diabetes, glucose intolerance, diabetic complications, or gestational diabetes contain the derivs. I (R1 = carbamoyl which may have 1-2 .alpha., thiocarbamoyl which may have 1-2 .alpha., sulfonyl having 1 .alpha., carbonyl having 1 .alpha.; R2, R3 = H,

C1-10 alkyl, C6-10 aryl, which may have 1-3 .beta., C7-16 aralkyl which may have 1-3 .beta. on the aryl moiety; W1-W3 = direct bond, C1-8alkylene; X, Y, Q = O, S; Z = :CH, N' Ar = benzene or naphthalene ring substituted with 1-4 L; L = H, C1-6 alkyl, C6-10 aryl which may have 1-3 .beta., C7-16 aralkyl which may have 1-3 .beta. on the aryl moiety; definitions of .alpha. and .beta. are given) or their pharmacol. acceptable salts. I and their salts are also useful as insulin resistance improving agents, hypoglycemics, inflammation inhibitors, immunomodulators, aldose reductase inhibitors, 5-lipoxygenase inhibitors, lipid peroxide formation inhibitors, PPAR activators, antiosteoporotic agents, leukotriene antagonists, adipocyte conversion promoters, cancer cell growth inhibitors, and Ca blockers. Feeding diabetic KK mice with feed contg. 0.01% 1-(4-chlorophenyl)-3-[4-[2-[4-(2,4-dioxothiazolidin-5ylmethyl)phenoxymethyl]-1-methyl-1H-benzimidazol-6-yloxy]-2,6dimethylphenyl]thiourea (II) for 3 days showed 48.9% hypoglycemic effect. Capsules, tablets, and granules contg. II were also formulated.

```
ANSWER 19 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
L3
    2002:353418 CAPLUS
ΑN
DN
    136:355073
TI
    Preparation of (arylacetamidophenyl) cycloalkylacetic acids as cell
    adhesion inhibitor for treatment of inflammatory diseases
    Harris, Neil Victor; Fenton, Garry
ΙN
PA
    Aventis Pharma Limited, UK
SO
    PCT Int. Appl., 88 pp.
    CODEN: PIXXD2
DΤ
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                        APPLICATION NO. DATE
     -----
                     ----
                                         -----
    WO 2002036553
                  A2
                                         WO 2001-GB4864
PI
                           20020510
                                                          20011102
    WO 2002036553
                    A3 20030313
           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
            UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                         GB 2000-27024 A 20001104
                                         US 2000-256170PP 20001213
                                         GB 2001-24528 A 20011012
                                         AU 2002-12481
    AU 2002012481
                      A5
                           20020515
                                                          20011102
                                         GB 2000-27024 A 20001104
                                         US 2000-256170PP 20001213
                                         GB 2001-24528 A 20011012
                                         WO 2001-GB4864 W 20011102
                           20030730
                                         EP 2001-980688
    EP 1330432
                      Α2
                                                          20011102
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                         GB 2000-27024 A 20001104
                                         US 2000-256170PP 20001213
                                         GB 2001-24528 A 20011012
                                         WO 2001-GB4864 W 20011102
```

OS MARPAT 136:355073

GI

$$R^{1}-L^{1}$$

$$A^{1}$$
 $L^{2}-Y$

AΒ Title compds. I [wherein ring Al = (un)substituted carbocycle, indanyl, or heterocycle; R1 = R3Z1-Het or R4NR5CONHAr1; R2 = H, halo, alkyl, or alkoxy; Het = (un)substituted bicyclic ring contg. at least 1 0, S, or N; R3 = (un)substituted (hetero)aryl; R4 = H or alkyl; R5 = aryl(alkyl) or heteroaryl(alkyl); or NR4R5 = cyclic amine; R6 = direct bond or alkylene, alkenylene, or alkynylene; R7 = direct bond, (hetero)cycloalkylene, (hetero)aryldiyl; C(:Z2)NR8, NR8C(:Z2), Z2, CO, C(:NOR8), NR8, NR8C(:Z2)NR8, SO2NR8, NR8SO2, OCO, CO2, NR8CO2, or OCONR8; or R6R7 = direct bond; R8 = H or alkyl; Ar1 = (hetero)aryldiyl; L1 = R6R7; L2 = alkylene; Y = carboxy or acid bioisostere; Z1 = 0 or S; and N-oxides, prodrugs, pharmaceutically acceptable salts, and solvates thereof] were prepd. as inhibitors of .alpha.4.beta.1 mediated cell adhesion for the treatment of inflammatory diseases, such as asthma. For example, coupling of [2-(o-tolylamino)benzoxazol-6-yl]acetic acid with [1-(4aminophenyl)cyclopentyl]acetic acid tert-Bu ester to give the amide, followed by deesterification with TFA, afforded II. I exhibited IC50 values in the range of 100 .mu.M to 1 nM for inhibition of cell adhesion to VCAM-1 and fibronectin with the integrin VLA-4 (.alpha.4.beta.1).

L3 ANSWER 20 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:171844 CAPLUS

DN 136:232200

TI Preparation of propenohydroxamic acid derivatives as TACE inhibitors for treatment of sepsis, infectious and autoimmune diseases, etc.

IN Hirata, Terukage; Misumi, Keiji; Ito, Kenji; Inokuma, Kenichi; Katayama, Kimiko

PA Wakunaga Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 70 pp. CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

Patel

<12/10/2003>

```
PΙ
                                  20020307
                                                    WO 2001-JP7292
      WO 2002018326
                           A1
                                                                          20010827
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
                LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
                PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                     JP 2000-263094 A 20000831
      AU 2001080167
                            A5
                                  20020313
                                                     AU 2001-80167
                                                                          20010827
                                                     JP 2000-263094 A 20000831
                                                     WO 2001-JP7292 W 20010827
      EP 1314721
                                  20030528
                            A1
                                                     EP 2001-958495
                                                                        20010827
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                     JP 2000-263094 A 20000831
                                                     WO 2001-JP7292 W 20010827
OS
      MARPAT 136:232200
GΙ
```

$$R^2$$
 R^1
 $N - OR^7$
 R^5
 R^5
 R^4
 R^3

The title compds. I [R1 represents hydrogen, alkyl or halogeno; R2 represents cycloalkyl, aryl, heteroaryl, etc.; R3 represents hydrogen, alkenyl, etc.; R4 represents H, (un)substituted alkyl, etc.; R5 represents R6CO, R6SO2, R6NHCO or R6NHCS (wherein R6 represents alkyl, cycloalkyl, cyclic amino, aryl, heteroaryl, etc.); R7 represents hydrogen or a protective group; and A represents CH, nitrogen, etc.] are prepd. I are useful as drugs for preventing and/or treating diseases such as sepsis, rheumatoid arthritis, infectious diseases, autoimmune diseases, malignant neoplasm, collagen disease, etc. E-3-[3-[N-(4-methoxybenzenesulfonyl)-N-methylaminophenyl]-3-(3-pyridyl)]propenohydroxamic acid (II) in vitro showed IC50 of 7 nM against TACE. II in vitro showed IC50 of > 10000 nM against MMP-1.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 21 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:142704 CAPLUS
- DN 136:200177
- TI Preparation of diheteroaryl ureas as antitumor agents

Ι

IN Santora, Vent; Askew, Benny; Ghose, Arup; Hague, Andrew; Kim, Tae Seong; Laber, Ellen; Li, Aiwen; Lian, Brian; Liu, Gang; Norman, Mark Henry; Smith, Leon; Tasker, Andrew; Tegley, Christopher; Yang, Kevin

Patel

<12/10/2003>

```
Amgen Inc., USA
     PCT Int. Appl., 371 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 2
     PATENT NO. KIND DATE
                                              APPLICATION NO. DATE
                       ____
                                              ------
     WO 2002014311 A2 20020221
WO 2002014311 A3 20020919
                                            WO 2001-US25472 20010815
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                              US 2000-225793PP 20000815
                                              AU 2001-84909
                                                              20010815
     AU 2001084909
                     A5
                              20020225
                                              US 2000-225793PP 20000815
                                              WO 2001-US25472W 20010815
     EP 1309589 A2
                              20030514
                                              EP 2001-964009 20010815
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                              US 2000-225793PP 20000815
                                              WO 2001-US25472W 20010815
PATENT FAMILY INFORMATION:
FAN 2002:965133
                                             APPLICATION NO. DATE
                      KIND DATE
     PATENT NO.
                                             _____
     __________
     US 2002193405 A1
                                              US 2002-77124
                                                                20020215
PΙ
                              20021219
     US 6645990
                      B2
                              20031111
                                              US 2000-225793PP 20000815
                                              US 2001-930753 A220010814
     US 2002173507 A1
                              20021121
                                              US 2001-930753 20010814
                                              US 2000-225793PP 20000815
                                              WO 2003-US4537 20030213
     WO 2003070727
                      A1
                              20030828
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
              UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                              US 2002-77124 A 20020215
     MARPAT 136:200177
os
GI
```

- The title compds. [I; A1-A6 = CH2, CH, C, O, S, Nh, N; X and Z taken together to form a N atom contg. ring; Y = NHCO(CH2)p, CH2CO2, NHSO2CH2, NHCO2, NHCONR6(CH2)r; R2 = alkylaminoalkynyl, cycloalkenylalkynyl, phenylalkynyl, etc.; p = 1-2; q = 0-1; r = 0-3; R6 is not defined] which are effective for prophylaxis and treatment of diseases, such as cell proliferation or apoptosis mediated diseases involving stroke, cancer and the like, were prepd. Thus, treating 3-(3-pyridyl)-4-thiazolylcarbonylazide in PhMe with a few drops of H2O afforded the urea II which showed cdk2/cyclin and cdk5/cyclin kinase activity with IC50 of < 50 .mu.M.
- L3 ANSWER 22 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:122976 CAPLUS
- DN 136:167181
- TI Preparation of biphenyl derivatives and their use as PPAR.gamma. receptor agonists
- IN Bernardon, Jean-Michel; Clary, Laurence
- PA Galderma Research & Development, Fr.
- SO PCT Int. Appl., 113 pp. CODEN: PIXXD2
- DT Patent
- LA French
- FAN.CNT 1

| ran. | PATENT NO. | | | | | KIND DATE | | | | | APPLICATION NO. DATE | | | | | | | | | |
|------|------------|--|-----|-----|-----|-----------|----------|------|-----|-------------------|----------------------|------|------|-----|------------|------|-----|-----|--|--|
| PI | WO | 2002012210 | | | Α | 1 | 20020214 | | | W | 20 | 01-F | R254 | 3 | 20010803 | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, | | |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | PL, | PT, | | |
| | | | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | TZ, | UA, | UG, | US, | | |
| | | | UZ, | VN, | YU, | ZA, | ZW, | ΑM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | ŬĠ, | ZW, | ΑT, | BE, | CH, | CY, | | |
| | | | DE, | DK, | ES, | FΊ, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | ΝL, | PT, | SE, | TR, | BF, | | |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | |
| | | . 2812876
. 2812876
. 2001085981 | | | | | | | | FR 2000-10447 | | | | | A 20000808 | | | | | |
| | FR | | | | A | 1 | 2002 | 0215 | | FR 2000-10447 200 | | | | | | 8080 | 308 | | | |
| | FR | | | | B1 | | 2002 | 0927 | | | | | | | | | | | | |
| | ΑU | | | | A. | 5 | 2002 | 0218 | | Æ | J 20 | 01-8 | 5981 | | 2001 | 0803 | | | | |
| | | | | | | | | | | Fl | R 20 | 00-1 | 0447 | Α | 2000 | 8080 | | | | |

WO 2001-FR2543 W 20010803 20030514 EP 1309575 Α1 EP 2001-965314 20010803 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR FR 2000-10447 A 20000808 WO 2001-FR2543 W 20010803 BR 2001013251 Α 20030624 BR 2001-13251 FR 2000-10447 A 20000808 WO 2001-FR2543 W 20010803

OS MARPAT 136:167181

GΙ

$$R^{2}$$
 R^{2}
 R^{1}
 XR^{4}

NH Y R5 O II

Ι

The invention concerns compds. I (e.g. N-[[4'-(2,4-dioxothiazolidin-5-ylmethyl)biphenyl-3-yl]methyl]-N-methylbenzamide) wherein: R1 represents a radical II or III; Y represents a CH2 radical or a S atom; R5 represents hydroxy, alkoxy, NH-OH, or N(R8)(R9) radical; and R6 represents alkyl, OR10, SR10, or (CH2)r-COR11. Said compds. are useful as PPAR.gamma. receptor activators in pharmaceutical compns. for use in human or veterinary medicine (in dermatol., as well as in the field of cardiovascular diseases, immune diseases and/or diseases related to lipid metab.), or in cosmetic compns. Agonist activity for 15 of the claimed compds. is reported. Although the methods of prepn. are not claimed, 82 example prepns. are included.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 23 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:104657 CAPLUS
- DN 136:151003
- TI Preparation of N-[(aryloxy)phenyl](thio)ureas and -carbamates as agrochemical fungicides
- IN Gerusz, Vincent; Mansfield, Darren James; Perez, Jose; Tickle, David;
 Vors, Jean-Pierre; Baldwin, Derek; Hough, Thomas; Mitchell, Dale Robert
- PA Aventis Cropscience S.A., Fr.
- SO Eur. Pat. Appl., 42 pp.

CODEN: EPXXDW

DT Patent LA French

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI EP 1178039 A1 20020206 EP 2001-420173 20010801

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

FR 2000-10305 A 20000804 FR 2812633 A1 20020208 FR 2000-10305 20000804 JP 2002114751 20020416 JP 2001-238513 A2 20010806 FR 2000-10305 A 20000804 US 2003008884 A1 20030109 US 2001-923124 20010806 FR 2000-10305 A 20000804

OS MARPAT 136:151003

GΙ

AB R6ZZ1NRC(:X)R5 [I; R = H, alkyl, etc.; R5 = NR1R2, OR3, SR3; R1,R2 = H, alkyl, acyl, etc.; RR1, RR3, R1R2 = atoms to complete a ring; R3 = H, alkyl, etc.; R6 = 2-benzothienyl, 5-tert-butyl-1,3,4-oxadiazol-2-yl, substituted Ph, etc.; X = O or S; Z = bond, O, CO, SOO-2, NH, etc.; Z1 = e.g., 2,5-dimethyl-1,4-phenylene] were prepd. Thus, 2-chloro-1,4-xylene was nitrated and the product etherified by 3-(Me3C)C6H4OH to give, after redn., the phenoxyanilline which was treated with Cl2CS and the product amidated by HNMeEt to give title compd. II. Data for biol. activity of I were given.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 24 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:51998 CAPLUS
- DN 136:118448
- TI Preparation of N-aryl-N'-arylethylurea derivatives as thrombin receptor antagonists
- IN Barrow, James C.; Nantermet, Philippe G.; Selnick, Harold G.; Hutchinson, John H.; Breslin, Michael J.; Glass, Kristen L.; Connolly, Thomas M.; Stern, Andrew
- PA Merck & Co., Inc., USA
- SO U.S. Pat. Appl. Publ., 40 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

PI US 2002007045 A1 20020117 US 2001-772353 20010130 US 6515023 B2 20030204 US 2000-179184PP 20000131

OS MARPAT 136:118448

GΙ

The title compds. [I; R1 = H, C1-10 alkyl; R2 = C1-10 alkyl, C3-8 AΒ cycloalkyl, CHMeCH2OMe, CHMeCH2F, CHMeCH2SMe; A = H, (CH2)m N(B)COR6 (wherein m = an integer of 0-5; B = H, R12, C3-8 cycloalkyl, CHMeCH2OMe, CHMeCH2F, CHMeCH2SMe; R6 = R13, Ar2, NHAr2, C3-8 cycloalkyl, CH2Ph, CMe2NCO2CMe3, C(NH2)Me2, OCMe3); A1, A2, A3, A4 = H, halo, NO2, cyano, R10, OR10, NR10R11; X = OH, OR4, O2CR4, O2CAr1, NR4Ar1, SR4, SOR4, SO2R4; wherein R4, R10, R12, R13 = H, C1-10 alkyl; Ar1, Ar2 = (un)substituted aryl or heteroaryl] and pharmaceutically acceptable salts thereof are prepd. These compds. can be used in a method of acting upon a thrombin receptor which comprises administering a therapeutically effective but non-toxic amt. of such compd. to a mammal, preferably a human. They are useful in inhibiting thrombin activation of the thrombin receptor, inhibiting the aggregation of blood platelets, treating thrombus formation or embolus formation, or preventing thrombus or embolus formation in a mammal (no data). Thus, to a soln. of 0.11 g triphosgene in 2 mL CH2Cl2 was added a soln. of 0.22 g tert-Bu 4-aminobenzylcarbamate, and 0.18 mL diisopropylethylamine in 10 mL CH2Cl2, dropwise over 15 min, followed by adding a soln. of 0.4 g 3-(4-aminomethylphenyl)-1-[2-(3,4-dichlorophenyl)-2-hydroxyethyl]-1-isopropylurea and 0.18 mL diisopropylethylamine in 5 mL CH2Cl2 over 5 min, and the resulting mixt. was stirred for 3 h to give, after workup and silica gel flash chromatog., 1-[(2S)-2-(3,4-Dichlorophenyl)-2-hydroxyethyl]-1-isopropyl-3-[4-[3-(4ureidomethylphenyl)ureidomethyl]phenyl]urea (II). A tablet and an i.v. formulation contg. II were prepd.

L3 ANSWER 25 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:10466 CAPLUS

DN 136:85809

TI Preparation of heteroarylphenyl substituted factor Xa inhibitors for treatment of thromboembolic disorders

IN Pinto, Donald J. P.; Quan, Mimi L.; Woerner, Francis J.

PA Dupont Pharmaceuticals Company, USA

SO PCT Int. Appl., 146 pp.

CODEN: PIXXD2
DT Patent

LA English

LA English

FAN.CNT 1

| | PA' | TENT : | NO. | | KI | ИD | DATE | | | A | PPLI | DATE | | | | | | |
|----------|-------|-----------------------------|------|------|-------------|-----|------|------|--------------|---------------------------|-----------------------|------|-------|-----|------|------|-----|-----|
| ΡI | WO | 2002 | 0006 | 47 | A1 20020103 | | | | | WO 2001-US20112 200106 | | | | | | | | |
| | | W: AE, AG, | | | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, |
| | | | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, |
| | | | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | ΝZ, | PL, | PT, | RO, | RU, |
| | | SD, SE,
ZA, ZW, | | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | ŪĠ, | UZ, | VN, | YU, | |
| | | | | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, | CY, |
| | | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | \mathtt{ML}_{\star} | MR, | ΝE, | SN, | TD, | TG | | |
| | | | | | | | | | | U | 0623 | | | | | | | |
| | US | 2002103202 | | | Α | 1 | 2002 | 0801 | | US 2001-887936 20010622 | | | | | | | | |
| | US | 6599 | 926 | | В | 2 | 2003 | 0729 | | | | | | | | | | |
| | | | | | | | | | | U | S 20 | 0623 | | | | | | |
| | ΕP | 1296977 | | | A | 1 | 2003 | 0402 | | E. | P 20 | 01-9 | 4669 | 3 | 2001 | 0622 | | |
| | | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, SI, LT, LV, FI, RO, MK, | | | | | | MK, | , CY, AL, TR | | | | | | | | | |
| | | | | | | | | | | US 2000-214033PP 20000623 | | | | | | | | |
| | | | | | | | | | | Mo | 20 | 01-U | S201: | L2W | 2001 | 0622 | | |
| \cap g | M/Z\I | יייע מס | 1360 | ጸ5ጰለ | a | | | | | | | | | | | | | |

OS MARPAT 136:85809

GI

AB Title compds. I, II, and III [wherein ring D1 = pyridine, pyrazine, pyridazine, or pyrimidine substituted with 1 Ra and 0-1 Rb; ring D2 = 5-membered heteroarom. ring substituted with 1 Ra and 0-1 Rb; E = 0, 3S, or NRc; ring D3 = 5-membered heteroarom. ring substituted with 1 Ra and 0-1 Rb; R, Ra, and Rb = H, alkyl, halo, OH, alkoxy, CN, (un)substituted carboximidamido, (alkyl)amino, OCF3, etc.; Rc = H, alkyl, alkoxy, (un)substituted (alkyl)amino, OCF3, etc.; G = absent or (CH2)1-3, (CH2)0-2CO(CH2)0-2, (CH2)0-2O(CH2)0-2, (CH2)0-2NH(CH2)0-2, (CH2)1-5, (CH2)0-2SOP(CH2)0-2, etc.; p = 0-2; G1 = (un)substituted (CH2)1-5, (CH2)0-2CH=CH(CH2)0-2, (CH2)0-2C.tplbond.C(CH2)0-2, (CH2)uCO(CH2)w, (CH2)uCO(CH2)w, (CH2)uNH(CH2)w, etc.; u + w = 0-4; G2 = Ph, naphthyl, or heteroaryl; M = isoxazoline, pyrazoline, isothiazoline,

triazoline tetrazoline, Ph, or substituted 5-6 membered heteroaryl; and pharmaceutically acceptable salts or prodrugs thereof] were prepd. as factor Xa inhibitors. For example, HCl gas was bubbled through 1-(3-cyanophenyl)-3-trifluoromethyl-5-[(2'-sulfonylmethyl-[1,1']-biphen-4-yl)aminocarbonyl]pyrazole in anhyd. EtOH to afford the ethoxyimidate intermediate. Addn. of N-methylmorpholine to the crude product in dioxane, followed by cyclization with semicarbazide.bul.HCl, gave the pyrazolamide IV. Some of the invention compds. inhibited factor Xa with Ki values of .ltoreq. 10 .mu.M. Thus, I are useful as anticoagulants for the treatment of thromboembolic disorders (no data).

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 26 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     2001:693283 CAPLUS
DN
     135:257039
     Preparation of polycyclic aryl and heteroaryl substituted benzenes useful
TI
     for selective inhibition of the coagulation cascade
IN
     South, Michael S.; Parlow, John J.
PΑ
     Pharmacia Corporation, USA
SO
     PCT Int. Appl., 437 pp.
     CODEN: PIXXD2
DΤ
     Patent
LΑ
     English
FAN.CNT 1
```

| | PATENT NO. | | | | KI | ND | DATE | | | A. | | | | | | | | |
|----|------------|-----------------------------|-----|-----|-----|-----|----------|------|-----|------------------|------|------|----------|-----|---------------|------|-----|-----|
| | | | | | | | | | | | | | | | | | | |
| ΡI | WO | 0 2001068605 | | | A1 | | 20010920 | | | WO 2001-US7918 | | | | | 20010313 | | | |
| | | W: AE, AG, | | | AL, | AM, | AT, | AU, | ΑZ, | ΒA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GΒ, | GD, | GE, | GH, | GM, |
| | | | HR, | ΗU, | ID, | ΙL, | IN, | IS, | JΡ, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, | LS, |
| | | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NΖ, | PL, | PT, | RO, |
| | | | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, |
| | | | VN, | YU, | ZA, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | \mathbf{MT} | | | |
| | | RW: | GH, | GM, | KΕ, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | ΒE, | CH, | CY, |
| | | | • | • | • | • | • | • | • | • | • | • | • | • | PT, | • | TR, | BF, |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | ΝE, | SN, | TD, | TG | | |
| | • | | | | | | | | | U: | 8894 | 3PP | 20000313 | | | | | |
| | | | | | | | | | | US 2000-252159PP | | | | | 20001120 | | | |
| | US | JS 2002025947
JS 6660885 | | | A1 | | 20020228 | | | U: | s 20 | 01-8 | 0495 | 9 | 2001 | 0313 | | |
| | US | | | | В. | 2 | 2003 | 1209 | | | | | | | | | | |
| | | | | | | | | | | U: | s 20 | 00-1 | 8894 | 3PP | 20000 | 0313 | | |

US 2000-188943PP 20000313 US 2000-252159PP 20001120

OS MARPAT 135:257039

GI

AB The title compds. [I; J = H, halo, OH, etc.; B = (un)substituted aryl, heteroaryl; A = a bond, CH2SO2, CH2, (CH2)2, etc.; Y = NH, O, CO, etc.; X0, R1, R2 = H, alkyl, halo, etc.; K = a bond, CH2, etc.; E0 = a bond, O, CONH, etc.; Y0 = (4-piperidinyl)methyl, (amidino)benzyl, etc.] and their pharmaceutically acceptable salts, useful as inhibitors of serine proteases of the coagulation cascade, were prepd. E.g., a multi-step synthesis of II.HCl which showed IC50 of > 30 .mu.M against factor VIIa, factor Xa and thrombin, and IC50 of 0.3 .mu.M against trypsin, was given.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 27 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:693247 CAPLUS
- DN 135:257156
- TI Preparation of sulfonamido substituted phenyl heteroaryl ureas as IL-8 receptor antagonists
- IN Widdowson, Katherine L.; Jin, Qi
- PA Smithkline Beecham Corporation, USA
- SO PCT Int. Appl., 44 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

| | PAT | ENT I | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON NO | э. | DATE | | | |
|----|----------------------------------|-------|-----|-----|-----|-----|--------------|-----|-----|-----|------|------|-------|-----|------------|------|-----|-----|
| PI | | 2001 | | | A: | _ | 2001
2002 | | | W | 20 | 01–บ | s774 | 6 | 2001 | 0309 | | |
| | W: AE, AG,
CR, CU,
HU, ID, | | | | | | | | | | | | - | | | | | |
| | | | - | • | | | - | | | • | | • | • | | LK,
PL, | • | , | - |
| | | | - | | | | SK,
AZ, | • | • | • | • | • | • | • | UG, | US, | UΖ, | VN, |
| | | R₩: | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | AT, | SE, | - | |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | ΝE, | SN, | TD, | ΤG | | |

| | | 2001
1261 | | 06 | A. | | | 0924 | | AU
US
WO | 20
20
20 | 00-18
01-45
00-18
01-US | 5606
38410
57746 |)PP
5 W | | 09
10
09 | | |
|----------|-----|--------------|-------|-------|-------|-----|------|------|-----|----------------|----------------|----------------------------------|------------------------|------------|---------|----------------|-----|-----|
| | 111 | | | | A2 | - | 2002 | | | | | 01-91 | | - | 200103 | | | |
| | | R: | | | | | DK, | | | | GR, | IT, | LI, | LU, | NL, S | Ε, Ι | MC, | PT, |
| | | | IE, | SI, | LT, | LV, | FΙ, | RO, | MK, | CY, | AL, | TR | | | | | | |
| | | | | | | | | | | US | 200 | 00-18 | 8410 |)PP | 200003 | 10 | | |
| | | | | | | | | | | WO | 200 | 01-US | 37746 | W | 200103 | 09 | | |
| | JΡ | 2003 | 53582 | 20 | T_2 | 2 | 2003 | 1202 | | JP | 200 | 01-56 | 7669 |) | 200103 | 09 | | |
| | | | | | | | | | | US | 200 | 00-18 | 8410 | PP | 200003 | 10 | | |
| | | | | | | | | | | WO | 200 | 01-US | 7746 | W | 200103 | 09 | | |
| | ИО | 2002 | 00419 | 93 | А | | 2002 | 0903 | | ИО | 200 | 02-41 | .93 | | 200209 | 03 | | |
| | | | | | | | | | | US | 200 | 00-18 | 8410 | PP | 200003 | 10 | | |
| | | | | | | | | | | WO | 200 | 01-US | 7746 | W | 2001030 |)9 | | |
| | US | 20030 | 05528 | 36 | Al | L | 2003 | 0320 | | US | 200 | 02-22 | 0772 | | 2002090 | 05 | | |
| | US | 66080 | 770 | | B2 | 2 | 2003 | 0819 | | | | | | | | | | |
| | | | | | | | | | | ŴΟ | 200 |)1-US | 7746 | W | 2001030 |)9 | | |
| OS
GI | MAF | RPAT [| 135:2 | 25715 | 56 | | | | | | | | | | | | | |

$$\begin{array}{c|c} R? & O \\ N & S & O \\ & & N \\ & & & \\$$

The title compds. [I; Rb = H, OH, aryl, etc.; m = 1-3; R1 = H, halo, NO2, etc.; Y = furyl, thiophenyl, pyridyl, etc.], useful in the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8), were prepd. Thus, reacting 3-amino-6-chloro-2-hydroxybenzenesulfonamide with 2-(azidocarbonyl)pyridine (prepns. given) in DMF afforded 62% I [Rb = H; Rl = 4-Cl; Y = 2-pyridyl]. The IL-8, and GRO-.alpha. chemokine effects of compds. I were detd. by in vitro assay (IC50 < 30 .mu.M).

L3 ANSWER 28 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:672048 CAPLUS

DN 135:246996

TI Preparation of 2,5-Diamino-benzaldehyde-derivates and their usage in hair dyes

PA Wella A.-G., Germany

SO Ger. Gebrauchsmusterschrift, 38 pp. CODEN: GGXXFR

DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|------------------|----------|
| | | | | | |
| PI | DE 20108608 | U1 | 20010913 | DE 2001-20108608 | 20010523 |
| | | | | DE 2001-20108608 | 20010523 |

OS MARPAT 135:246996

AB The invention concerns the synthesis of 2,5-Diamino-benzaldehyde-derivs.

Patel

and their usage in hair dye compns. as developers along with coupling agents and optionally direct dyes. Thus a hair dye contained (g): 1,4-diamino-2-(piperidine-1-yl-iminomethyl)-benzene 0.30; 3-methyl-4-aminophenol 0.30; 1-naphthol 0.30; 1,3-dihydroxy benzene 0.18; potassium oleate 10.0; ammonia (22% soln.) 10.0; ethanol 10; ascorbic acid 0.3; water to 100. Upon usage, 30 g of the compn. were mixed with 30 g 6% hydrogen peroxide soln.; after 30 min the dye was rinsed, the resulting color was reddish brown.

```
ANSWER 29 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
L3
      2001:661391 CAPLUS
ΑN
DN
      135:210946
TI
      Preparation of pyridylamides as Factor Xa inhibitors.
      Zhu, Bing-yan; Zhang, Penglie; Wang, Lingyan; Huang, Wenrong; Goldman,
IN
      Erick; Li, Wenhao; Zuckett, Jingmei; Song, Yonghong; Scarborough, Robert
      Cor Therapeutics, Inc., USA
PA
      PCT Int. Appl., 306 pp.
SO
      CODEN: PIXXD2
DT
      Patent
LΑ
      English
FAN.CNT 6
                     KIND DATE
                                           APPLICATION NO. DATE
      PATENT NO.
                           ____
                                  _____
                                                      _____
                        A2 20010907
A3 20020502
      WO 2001064642
                                   20010907
                                                 WO 2001-US6247 20010228
PΙ
      WO 2001064642
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, MI, MR, NE, SN, TD, TG
                BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                      US 2000-185746PP 20000229
                                                      US 2000-663420 A 20000915
PATENT FAMILY INFORMATION:
FAN 2001:208239
                                                      APPLICATION NO. DATE
      PATENT NO.
                          KIND DATE
                          ____
                                                     ______
      WO 2001019788 A2
                                   20010322
                                                      WO 2000-US25196 20000915
PΤ
      WO 2001019788
                          A3 20010809
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
                HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
                LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
                SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
                ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
                DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
                CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                      US 1999-154332PP 19990917
                                                      US 2000-185746PP 20000229
      EP 1216228
                            A2
                                   20020626
                                                      EP 2000-963452 20000915
```

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

US 1999-154332PP 19990917

Patel <12/10/2003>

IE, SI, LT, LV, FI, RO, MK, CY, AL

| | BR 2000014076 | A 20021015 | US 2000-185746PP 20000229
WO 2000-US25196W 20000915
BR 2000-14076 20000915
US 1999-154332PP 19990917
US 2000-185746PP 20000229 |
|-----|---|---|--|
| | JP 2003509406 | T2 20030311 | US 1999-154332PP 19990917
US 2000-185746PP 20000229 |
| | NO 2002001229 | A 20020521 | WO 2000-US25196W 20000915
NO 2002-1229 20020312
US 1999-154332PP 19990917
US 2000-185746PP 20000229
WO 2000-US25196W 20000915 |
| FAN | 2001:208248 PATENT NO. | KIND DATE | |
| PI | WO 2001019798
WO 2001019798 | A2 20010322
A3 20011025 | WO 2000-US25195 20000915 |
| | W: AE, AG,
CR, CU,
HU, ID,
LU, LV,
SD, SE,
ZA, ZW,
RW: GH, GM,
DE, DK, | AL, AM, AT, AU, CZ, DE, DK, DM, IL, IN, IS, JP, MA, MD, MG, MK, SG, SI, SK, SL, AM, AZ, BY, KG, KE, LS, MW, MZ, ES, FI, FR, GB, | AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, KZ, MD, RU, TJ, TM SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, |
| | CF, CG, | | GW, ML, MR, NE, SN, TD, TG
US 1999-154332PP 19990917
EP 2000-963451 20000915 |
| | R: AT, BE, | | FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, MK, CY, AL US 1999-154332PP 19990917 |
| | BR 2000014078 | A 20021231 | WO 2000-US25195W 20000915
BR 2000-14078 20000915
US 1999-154332PP 19990917
WO 2000-US25195W 20000915 |
| | JP 2003509412 | T2 20030311 | |
| | | A 20020521 | NO 2002-1230 20020312
US 1999-154332PP 19990917
WO 2000-US25195W 20000915 |
| FAN | 2001:661392
PATENT NO. | KIND DATE | APPLICATION NO. DATE |
| PI | WO 2001064643
WO 2001064643 | A2 20010907
A3 20020404 | WO 2001-US6255 20010228 |
| | CR, CU,
HU, ID,
LU, LV,
SD, SE, | CZ, DE, DK, DM, IL, IN, IS, JP, MA, MD, MG, MK, SG, SI, SK, SL, | AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, KG, KZ, MD, RU, TJ, TM |
| | RW: GH, GM,
DE, DK, | KE, LS, MW, MZ,
ES, FI, FR, GB, | SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, GN, GW, ML, MR, NE, SN, TD, TG |

```
US 2000-185746PP 20000229
                                       US 2000-663420 A 20000915
                    A2
    EP 1259485
                         20021127
                                       EP 2001-918257 20010228
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                       US 2000-185746PP 20000229
                                       US 2000-663420 A 20000915
                                       WO 2001-US6255 W 20010228
FAN 2002:11104
    PATENT NO. KIND DATE
                                      APPLICATION NO. DATE
                   ____
                         -----
                                       ______
    US 2002002183 A1 20020103
US 6376515 B2 20020423
                         20020103
                                       US 2001-794225 20010228
                                       US 2000-185746PP 20000229
                                       US 2000-663420 A220000915
    US 2003162690 A1 20030828
                                       US 2002-126976 20020422
                                       US 2000-185746PP 20000229
                                       US 2000-663420 A220000915
                                       US 2001-794225 A120010228
FAN 2002:522631
    PATENT NO. KIND DATE
                                      APPLICATION NO. DATE
                   ----
                                      _____
    US 2002091116 A1 20020711
                                       US 2001-794214 20010228
PΙ
    US 6632815 B2 20031014
                                       US 1999-154332PP 19990917
                                       US 2000-662807 A220000915
```

OS MARPAT 135:210946

AB AQDEGJX [A = alkyl, cycloalkyl, NR1R2, NR1R1C(:NR3), (substituted) Ph, naphthyl, mono- or bicyclic heterocyclyl, etc.; R1-R3 = H, alkyl, alkenyl, alkynyl, cycloalkyl, (alkyl)aryl, (alkyl)heteroaryl, etc.; R1R2 or R2R3 = atoms to form a 3-8 membered (substituted) (heterocyclic) ring; Q = bond, CH2, CO, O, NR7, etc.; R7 = H, alkyl, (alkyl)aryl, (alkyl)heteroaryl, etc.; D = bond, (substituted) Ph, naphthyl, mono- or bicyclic heterocyclyl; E = bond, alkyl, S, SO, SO2, alkoxy, etc.; G = (substituted) alkenyl, cycloalkenyl, phenylene, heterocyclyl, fused cyclic system; J = bond, NR9CO, O, S, SO, SO2, SO2NR9, CH2, NR9, etc.; R9 = H, alkyl, (alkyl)aryl, etc.; X = (substituted) Ph, naphthyl, heteroaryl, fused bicyclyl], were prepd. as antithrombotics (no data). Thus, N-(5-bromo-2-pyridinyl) 2-aminophenylcarboxamide (prepn. given), 4-[(2-tert-butylaminosulfonyl)phenyl]benzoyl chloride, and pyridine were stirred overnight in CH2Cl2 to give 85% N-(5-bromo-2-pyridinyl)-[2-4-[(2aminosulfonyl)phenyl]phenylcarbonylamino]phenylcarboxamide.

- L3 ANSWER 30 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:661241 CAPLUS
- DN 135:221308
- TI Use of PDGF receptor tyrosine kinase inhibitors for the treatment of diabetic nephropathy
- IN Atkins, Robert Charles; Chadban, Steven James; Cooper, Mark Emmanuel;
 Gilbert, Richard Ernest; Hill, Prudence Ann; Kelly, Darren James;
 Nikolic-Paterson, David John
- PA Novartis A.-G., Switz.; The University of Melbourne; Southern Health
- SO PCT Int. Appl., 26 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

```
PATENT NO.
                       KIND DATE
                                              APPLICATION NO. DATE
     WO 2001064200
                       A2
                              20010907
                                              WO 2001-EP2340 20010301
     WO 2001064200
                       A3
                              20020117
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
              HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
              LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
              RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
              VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                              EP 2000-810181 A 20000303
                                              EP 2001-921298
     EP 1259242
                        A2
                              20021127
                                                                 20010301
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                               EP 2000-810181 A 20000303
                                              WO 2001-EP2340 W 20010301
     JP 2003525240
                         T2
                              20030826
                                               JP 2001-563097
                                                                 20010301
                                              EP 2000-810181 A 20000303
                                              WO 2001-EP2340 W 20010301
     US 2003186977
                        A1
                              20031002
                                              US 2003-220214
                                                                 20030415
                                              EP 2000-810181 A 20000303
                                              WO 2001-EP2340 W 20010301
OS
     MARPAT 135:221308
```

The present invention relates to the use of PDGF receptor tyrosine kinase AB inhibitors, esp. N-phenyl-2-pyrimidineamine derivs. for the treatment of diabetic nephropathy, glomerulonephritis, chronic pyelonephritis or IgA nephropathy. Thus, CGP 57148B administered in gum arabic as an oral suspension to rats, the left kidney of which was removed, was shown to inhibit the diorder.

- L3ANSWER 31 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:416931 CAPLUS
- DN 135:33495
- Arylamine derivatives and their use as anti-telomerase agent TT
- IN Mailliet, Patrick; Riou, Jean-Francois; Mergny, Jean-Louis; Laoui, Abdelazize; Lavelle, Francois; Petitgenet, Odile
- PΑ Aventis Pharma S.A., Fr.
- SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

- DT Patent
- LΑ French

FAN CMT 1

| L'MAIN * | CNII | | | | | | | | | | | | | | | | | |
|----------|---------|------|-----|-----|-----|------|------|-----|-----|------|------|------------------------|-----|------|------|-----|-----|--|
| | PATENT | NO. | | KI | ND | DATE | | | Α | PPLI | CATI | ON N | э. | DATE | | | | |
| | | | | | | | | | - | | | | | | | | | |
| PI | WO 2001 | 0402 | 18 | Α | 1 | 2001 | 0607 | | W | 0 20 | 00-F | R331 | 0 | 2000 | 1127 | | | |
| | W: | ΑE, | AG, | ΑL, | AM, | ΑT, | ΑU, | ΑZ, | ΒA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | |
| | | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | |
| | | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NZ, | PL, | PT, | RO, | RU, | |
| | | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | TZ, | UA, | ΰĠ, | UZ, | VN, | YU, | |
| | | ZA, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | TJ, | $\mathbf{M}\mathbf{T}$ | | | | | | |
| | R₩: | GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | ΤZ, | ŪG, | ZW, | ΑT, | BE, | CH, | CY, | |
| | | DE, | DK, | ES, | FΊ, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, | |
| | | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN. | TD. | TG | | | |

| FR 2801588
FR 2801588
BR 20000159 | В1 | 20010601
20020301
20020806 | FR 1999-15031 A 19991129
FR 2000-10561 A 20000811
FR 1999-15031 19991129
BR 2000-15992 20001127
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811 |
|---|--------|---------------------------------------|--|
| EP 1244650
EP 1244650
R: AT, | В1 | 20021002
20030625
, DK, ES, FR, | WO 2000-FR3310 W 20001127
EP 2000-985339 20001127
GB, GR, IT, LI, LU, NL, SE, MC, PT, |
| | | , FI, RO, MK, | |
| JP 20035156 | 504 Т2 | 20030507 | JP 2001-541902 20001127
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811
WO 2000-FR3310 W 20001127 |
| EE 20020026 | 53 A | 20030616 | EE 2002-263 20001127
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811 |
| AT 243692 | E | 20030715 | WO 2000-FR3310 W 20001127
AT 2000-985339 20001127
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811 |
| us 6645964 | В1 | 20031111 | WO 2000-FR3310 W 20001127
US 2000-722361 20001128
FR 1999-15031 A 19991129
US 2000-176632PP 20000119
US 2000-218059PP 20000713 |
| NO 20020025 | 528 A | 20020528 | FR 2000-10561 A 20000811
NO 2002-2528 20020528
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811 |
| BG 106753 | A | 20030228 | WO 2000-FR3310 W 20001127
BG 2002-106753 20020529
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811
WO 2000-FR3310 W 20001127 |
| | 22.425 | | TO LOVO PILOVEO II EVVOLEDI |

OS MARPAT 135:33495

AB Nitrogen heterocycles, esp. diaminotriazines, were prepd. for use as telomerase inhibitors and anticancer agents. Thus, 2-amino-4,6-dichloro-1,3,5-triazine was treated with 1-methyl-4,6-quinaldinium chloride hydrochloride to give 2-amino-4,6-bis(1-methyl-4-amino-6-quinaldinio)amino-1,3,5-triazine dichloride hydrochloride which was converted to its free base. The free base had a telomerase-inhibiting IC50 of 0.25 .mu.M and a cytotoxic IC50 of 0.59-1.9 .mu.M.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 32 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:265376 CAPLUS
- DN 134:295625
- TI Preparation of novel diarylamide derivatives and use thereof as remedies of abnormal propagation of vascular smooth muscle cells
- IN Ogita, Haruhisa; Isobe, Yoshiaki; Takaku, Haruo

PA Japan Energy Corporation, Japan

SO PCT Int. Appl., 196 pp.

CODEN: PIXXD2

DT Patent

Japanese LA

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. ΡĮ WO 2001025190 **A**1 20010412 WO 2000-JP6667 20000927

W: AU, CA, JP, NZ, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

JP 1999-281271 A 19991001 JP 1999-290789 A 19991013

AU 2000074466 **A5** 20010510 AU 2000-74466 20000927

JP 1999-281271 A 19991001

JP 1999-290789 A 19991013 WO 2000-JP6667 W 20000927

EP 1229010 A1 20020807 EP 2000-962891 20000927

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

JP 1999-281271 A 19991001

JP 1999-290789 A 19991013

WO 2000-JP6667 W 20000927

MARPAT 134:295625 OS

GΙ

$$R^{5-R^{4}}$$
 R^{3}
 R^{2}
 R^{2}
 R^{2}
 R^{2}
 R^{2}
 R^{2}

AΒ Title compds. [I; wherein A and B are each an arom. ring such as benzene ring; COY and NHCOX are adjacent to each other and bonded to carbon atoms constituting A; X is alkylene, alkyleneoxy, or a single bond; Y is alkyl, alkoxy, hydroxyl, or optionally substituted amino; R1 is hydrogen, halogeno, hydroxyl, alkyl, or the like, with the proviso that when A is a

Patel

<12/10/2003>

benzene ring, R1 is not hydrogen; R2 is hydrogen, halo, hydroxyl, alkyl; R3 and R4 are each optionally substituted imino, oxygen, or a single bond; R5 is alkyl, optionally substituted Ph, etc.; Z is oxygen or sulfur] and pharmaceutical compns. contg. the derivs. or salts as the active ingredient for prevention or treatment of diseases caused by abnormal propagation of vascular smooth muscle cells. Thus, the title compd. II was prepd. and tested.

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L3
     ANSWER 33 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
     2000:513673 CAPLUS
AN
DN
     133:135235
TI
     Preparation and anti-tumor, anti-atherosclerosis, anti-psoriasis,
     anti-diabetes, and anti-arthritis activities of quinolines and
     quinazolines
IN
     Kubo, Kazuo; Fujiwara, Yasunari; Isoe, Toshiyuki
     Kirin Beer Kabushiki Kaisha, Japan
PA
    PCT Int. Appl., 208 pp.
     CODEN: PIXXD2
DT
    Patent
LA.
    Japanese
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
                     ----
                                         WO 2000-JP255 20000120
    WO 2000043366 A1 20000727
PΙ
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          JP 1999-14858 A 19990122
                                          JP 1999-26691 A 19990203
                                          JP 1999-142493 A 19990521
                                          JP 1999-253624 A 19990907
    CA 2361057
                      AΑ
                           20000727
                                          CA 2000-2361057 20000120
                                          JP 1999-14858 A 19990122
                                          JP 1999-26691 A 19990203
                                          JP 1999-142493 A 19990521
                                          JP 1999-253624 A 19990907
                                         WO 2000-JP255 W 20000120
    BR 2000007656
                           20011030
                                         BR 2000-7656
                      Α
                                                          20000120
                                          JP 1999-14858 A 19990122
                                          JP 1999-26691 A 19990203
                                          JP 1999-142493 A 19990521
                                         JP 1999-253624 A 19990907
                                         WO 2000-JP255 W 20000120
    EP 1153920
                      A1
                                         EP 2000-900841
                           20011114
                                                          20000120
    EP 1153920
                      В1
                           20031029
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
```

JP 1999-14858 A 19990122 JP 1999-26691 A 19990203

Patel <12/10/2003>

IE, SI, LT, LV, FI, RO

| | | | | JP | 1999-142493 | A 19990521 |
|----|-------------------|----|----------|----|-------------|------------|
| | | | | JP | 1999-253624 | A 19990907 |
| | | | | WO | 2000-JP255 | W 20000120 |
| | JP 2003286263 | A2 | 20031010 | JP | 2003-128216 | 20000120 |
| | | | | JР | 1999-14858 | A 19990122 |
| | | | | JР | 1999-26691 | A 19990203 |
| | | | | JP | 1999-142493 | A 19990521 |
| | | | | JP | 1999-253624 | A 19990907 |
| | | | | JP | 2000-594782 | A320000120 |
| | NO 2001002617 | A | 20010914 | ИО | 2001-2617 | 20010529 |
| | | | | JP | 1999-14858 | A 19990122 |
| | | | | JP | 1999-26691 | A 19990203 |
| | | | | JР | 1999-142493 | A 19990521 |
| | | | | JΡ | 1999-253624 | A 19990907 |
| | | | | WO | 2000-JP255 | W 20000120 |
| os | MARPAT 133:135235 | | | | | |

OS MARPAT 133:135235

Title compds. [I; X and Z represent each CH or N; R1-3 represent each H, optionally substituted alkoxy, etc.; R4 represents H; R5-8 represent each H, halogeno, alkyl, alkoxy, alkylthio, nitro or amino, provided that all of R5-8 do not represent H simultaneously; R9 and R10 represent each H, alkyl or alkylcarbonyl; and R11 represents alkyl, alkenyl, alkynyl or aralkyl], pharmaceutically acceptable salts and solvates, and medicinal compns. contg. the same are prepd. and tested having antitumor activity and causing no morphol. change in cells. Thus, the title compd. I (X = CH; Z = CH; R1, R4, R5, R7-R10 each an H; R11 = 3,5-F2C6H3) was prepd. and tested.

Ι

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L3 ANSWER 34 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2000:457050 CAPLUS

DN 133:79374

TI Aromatic heterocyclic compounds as thrombin or factor Xa inhibitors

IN Lam, Patrick Yuk Sun; Clark, Charles G.; Li, Hui Yin; Pinto, Donald J. P.

PA Du Pont Pharmaceuticals Co., USA

SO PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

Patel

| | PA | CENT : | NO. | | KII | 4D | DATE | | | A | PLI | CATI | ои и | ٥. | DATE | | | |
|------|----------------------|---|--|--------------------------------------|--|---------------------------------|--|---|--------------------------|--|--|---|---|--|---|--|------------|-----|
| PI | WO | | AL,
NO, | AU,
NZ, | BR, | CA,
RO, | 2000
CN,
SG, | CZ, | EE, | HU, | IL, | IN, | JP, | KR, | LT, | LV, | | |
| | | RW: | | BE, | | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, |
| | EP | 1140 | 871 | | | _ | 2001 | | | E | 9 | 99-9 | 6748 | 5 | 1998
1999 | 1222 | | |
| | | R: | | | | | DK, | | FR, | | | | | | NL, | | MC, | PT, |
| | | | | | | | | | | | | | | | 1999 | | | |
| | US | 6369 | 227 | | В. | l | 20020 | 0409 | | | | | 6983 | | 1999 | | | |
| | TIC | 6403 | 502 | | В: | 1 | 20020 | ne11 | | | | | | | 1998:
1999: | | | |
| | US | 0403 | 505 | | . ط | I. | 20021 | 0011 | | | | | | | 1998 | | | |
| | JP | 2002 | 5372 | 27 | T2 | 2 | 2002 | 1105 | | | | | | | 1999 | | | |
| | | | | | | | | | | | | | | | 1998:
1999: | | | |
| | US | 2002 | 1158 | 54 | A. | 1 | 20020 | 0822 | | | | | | | 2001 | | | |
| | | 6602 | | _ | B2 | 2 | 20030 | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 1998 | | | |
| | IIS | 6500 | 855 | | B* | 1 | 2002 | 1231 | | | | | | | .1999:
2002: | | | |
| | US | 2003 | 0043 | 44 | A. | 1 | 2002 | 0102 | | | | | | | _ | | | |
| | | | | | | | | | | | | | | | 1998:
1999: | | | |
| PATE | ידע א | TAMIL | Y TNI | ORM | OITA | 1 : | | | | U. | э тэ | 99-4 | 0903 | U AS | 1333. | 1222 | | |
| FAN | 200 | 00:45 | 6883 | | | | | | | | | | | | | | | |
| | PA: | CENT : | NIC | | TZ T N | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | DATE | | | |
| ТЧ | | | | | | | | | | | | | | | | | | |
| PI | | 2000 | 0386
AL, |
33
AU, | A.
BR, |
l
CA, | 2000
CN, | 0706
CR, | CZ, | WO
DM, |
19
EE, |
99-U
HU, | S307 |
37
IN, | 1999;
JP, |
1221
KR, | | |
| ΡΊ | | 2000 | 0386
AL,
MA, | 33
AU,
MK, | BR,
MX, |
l
CA,
NO, | 20000
CN, | 0706
CR,
PL, | CZ,
RO, | DM,
SG, |
19
EE, |
99-U
HU, | S307 |
37
IN, | 1999;
JP, |
1221
KR, | | |
| ΡΊ | | 2000
W: | 0386
AL,
MA, | AU,
MK,
BY, | AI
BR,
MX,
KG, |
CA,
NO,
KZ, | 2000
CN, | O706
CR,
PL,
RU, | CZ,
RO,
TJ, | DM,
SG,
TM | 19
EE,
SI, | 99-U
HU,
SK, | S307
IL,
TR, |
37
IN,
TZ, | 1999:
JP,
UA, | 1221
KR,
VN, | ZA, | AM, |
| PI | | 2000
W: | 0386
AL,
MA, | AU,
MK,
BY,
BE, | AI
BR,
MX,
KG, |
CA,
NO,
KZ, | 20000
CN,
NZ,
MD, | O706
CR,
PL,
RU, | CZ,
RO,
TJ, | DM,
SG,
TM
FI, | 19
EE,
SI,
FR, | 99-U
HU,
SK,
GB, | S307
IL,
TR, |
37
IN,
TZ, | 1999:
JP,
UA, | 1221
KR,
VN, | ZA, | AM, |
| PI | WO | 2000
W:
RW: | 0386
AL,
MA,
AZ,
AT,
PT, | AU,
MK,
BY,
BE,
SE | BR,
MX,
KG,
CH, | CA,
CA,
NO,
KZ,
CY, | 20000
CN,
NZ,
MD, | 0706
CR,
PL,
RU,
DK, | CZ,
RO,
TJ,
ES, | DM,
SG,
TM
FI, | 19
EE,
SI,
FR, | 99-U
HU,
SK,
GB, | S307
IL,
TR,
GR, |
37
IN,
TZ,
IE, | 1999;
JP,
UA,
IT, | 1221
KR,
VN,
LU, | ZA, | AM, |
| PI | WO | 2000
W: | 0386
AL,
MA,
AZ,
AT,
PT, | AU,
MK,
BY,
BE,
SE | BR,
MX,
KG,
CH, | CA,
CA,
NO,
KZ,
CY, | 20000
CN,
NZ,
MD, | 0706
CR,
PL,
RU,
DK, | CZ,
RO,
TJ,
ES, | WCDM,
SG,
TM
FI, | FR, 19 | 99-U
HU,
SK,
GB,
98-1 | S307
IL,
TR,
GR, |
37
IN,
TZ,
IE,
7PP | 1999:
JP,
UA, | 1221
KR,
VN,
LU,
1223 | ZA, | AM, |
| PI | WO | 2000
W:
RW: | 0386
AL,
MA,
AZ,
AT,
PT, | AU,
MK,
BY,
BE,
SE | AI
BR,
MX,
KG,
CH, | CA,
NO,
KZ,
CY, | 20000
CN,
NZ,
MD,
DE, | 0706
CR,
PL,
RU,
DK, | CZ,
RO,
TJ,
ES, | DM,
SG,
TM
FI,
US | FR, 19 19 19 19 19 19 19 19 | 99-U
HU,
SK,
GB,
98-1
99-2
98-1 | S307
IL,
TR,
GR,
1362
3207
1362
S307 |
37
IN,
TZ,
IE,
7PP
30
7PP
37W | 1999;
JP,
UA,
IT,
1998;
1999;
1998;
1999; | 1221
KR,
VN,
LU,
1223
1221
1223
1221 | ZA, | AM, |
| PI | WO | 2000
W:
RW:
2320 | 03866
AL,
MA,
AZ,
AT,
PT, | AU,
MK,
BY,
BE,
SE | AI
BR,
MX,
KG,
CH, | CA,
NO,
KZ,
CY, | 20000
CN,
NZ,
MD,
DE, | 0706
CR,
PL,
RU,
DK, | CZ,
RO,
TJ,
ES, | DM,
SG,
TM
FI,
US | FR,
SI,
FR,
19
A 19
D 19
P 19 | 99-U
HU,
SK,
GB,
98-1
99-2
98-1
99-U
99-9 | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755 |
37
IN,
TZ,
IE,
7PP
30
7PP
37W | 1999;
JP,
UA,
IT,
1998;
1999;
1999;
1999; | 1221
KR,
VN,
LU,
1223
1221
1223
1221 | ZA,
MC, | AM, |
| PI | WO | 2000
W:
RW:
2320 | 03866
AL,
MA,
AZ,
AT,
PT,
730 | B3
AU,
MK,
BY,
BE,
SE | AI
BR,
MX,
KG,
CH, | CA, NO, KZ, CY, A | 20000
CN,
NZ,
MD,
DE, | 0706
CR,
PL,
RU,
DK, | CZ,
RO,
TJ,
ES, | DM,
SG,
TM
FI,
US | FR,
SI,
FR,
19
A 19
D 19
P 19 | 99-U
HU,
SK,
GB,
98-1
99-2
98-1
99-U
99-9 | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755 |
37
IN,
TZ,
IE,
7PP
30
7PP
37W | 1999;
JP,
UA,
IT,
1998;
1999;
1999;
1999; | 1221
KR,
VN,
LU,
1223
1221
1223
1221 | ZA,
MC, | AM, |
| PI | WO | 2000
W:
RW:
2320 | 03866
AL,
MA,
AZ,
AT,
PT,
730 | B3
AU,
MK,
BY,
BE,
SE | AI
BR,
MX,
KG,
CH, | CA, NO, KZ, CY, A | 20000
CN,
NZ,
MD,
DE, | 0706
CR,
PL,
RU,
DK, | CZ,
RO,
TJ,
ES, | DM,
SG,
TM
FI,
US
CA
WG
EI
GB, | FR,
SI,
FR,
19
A 19
B 19
GR, | 99-U
HU,
SK,
GB,
98-1
99-2
98-1
99-U
99-9
IT, | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755
LI, |
37
IN,
TZ,
IE,
7PP
30
7PP
37W
4
LU, | 1999:
JP,
UA,
IT,
1998:
1999:
1999:
NL, | 1221
KR,
VN,
LU,
1223
1221
1223
1221
5E, | ZA,
MC, | AM, |
| PI | WO
CA
EP | 2000
W:
RW:
2320
1058
R: | 0386;
AL,
MA,
AZ,
AT,
PT,
730
549
AT,
IE, | B3
AU,
MK,
BY,
BE,
SE | AL
BR,
MX,
KG,
CH,
AL
CH,
LT, | CA, NO, KZ, CY, DE, | 20000
CN,
NZ,
MD,
DE,
20000 | 0706
CR,
PL,
RU,
DK,
0706 | CZ,
RO,
TJ,
ES, | DM, SG, TM FI, US CA WG EI GB, WG | FR,
SI,
FR,
19
A 19
S 19
CR,
S 19
O 19 | 99-U
HU,
SK,
GB,
98-1
99-2
98-1
99-U
99-9
IT,
98-1 | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755
LI,
1362
S307 |
37
IN,
TZ,
1E,
7PP
30
7PP
37W
LU,
7PP | 1999:
JP,
UA,
IT,
1998:
1999:
1999:
NL,
1998:
1999: | 1221
KR,
VN,
LU,
1223
1221
1223
1221
SE,
1223
1221 | ZA,
MC, | AM, |
| PI | WO
CA
EP | 2000
W:
RW:
2320 | 0386;
AL,
MA,
AZ,
AT,
PT,
730
549
AT,
IE, | B3
AU,
MK,
BY,
BE,
SE | AI
BR,
MX,
KG,
CH, | CA, NO, KZ, CY, DE, | 20000
CN,
NZ,
MD,
DE, | 0706
CR,
PL,
RU,
DK,
0706 | CZ,
RO,
TJ,
ES, | DM, SG, TM FI, US CA WG EI GB, US | FR,
SI,
FR,
S 19
A 19
S 19
C 19
GR,
S 19
GR, | 99-U
HU,
SK,
GB,
98-1
99-2
98-1
99-U
99-9
IT,
98-1
99-U | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755
LI,
1362
S307
6983 | 7PP
37
1N,
TZ,
TZ,
7PP
30
7PP
37W
4
LU,
7PP
37W | 1999:
JP,
UA,
IT,
1998:
1999:
1999:
NL,
1998:
1999:
1999: | 1221
KR,
VN,
LU,
1223
1221
1223
1221
SE,
1223
1221
1223 | ZA,
MC, | AM, |
| PI | WO
CA
EP | 2000
W:
RW:
2320
1058
R: | 0386;
AL,
MA,
AZ,
AT,
PT,
730
549
AT,
IE, | B3
AU,
MK,
BY,
BE,
SE | AL
BR,
MX,
KG,
CH,
AL
CH,
LT, | CA, NO, KZ, CY, CY, LV, | 20000
CN,
NZ,
MD,
DE,
20000 | 0706
CR,
PL,
RU,
DK,
0706 | CZ,
RO,
TJ,
ES, | DM, SG, TM FI, US WG EI GB, US WG US US | FR, SI, FR, SI, SI, SI, SI, SI, SI, SI, SI, SI, SI | 99-U
HU,
SK,
GB,
98-1
99-2
98-1
99-U
99-9
IT,
98-1
99-U
99-4 | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755
LI,
1362
S307
6983 | 7PP
37
1N,
TZ,
1E,
7PP
30
7PP
37W
4
LU,
7PP
37W
0 | 1999:
JP,
UA,
IT,
1998:
1999:
1999:
NL,
1998:
1999: | 1221
KR,
VN,
LU,
1223
1221
1223
1221
SE,
1223
1221
1223
1222
1223 | ZA,
MC, | AM, |
| PI | CA
EP
US | 2000
W:
RW:
2320
1058
R:
6369 | 0386;
AL,
MA,
AZ,
AT,
PT,
730
549
AT,
IE, | BE, SI, | AI
BR,
MX,
KG,
CH,
AI
CH,
LT, | CA, NO, KZ, CY, CY, LV, | 20000
CN,
NZ,
MD,
DE,
20000
DK,
FI, | 0706
CR,
PL,
RU,
DK,
0706
1213
ES,
RO | CZ,
RO,
TJ,
ES, | DM, SG, TM FI, US WG EI GB, US WG US | FR, S19 GR, S1 | 99-U
HU,
SK,
GB,
98-1
99-2
99-1
99-1
99-4
99-4
98-1
99-4 | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755
LI,
1362
S307
6983
1362
6983
1362 | 7PP
37W
1E,
7PP
30
7PP
37W
4 LU,
7PP
37W
0
7PP
5 | 1999
JP,
UA,
IT,
1998
1999
1998
1999
NL,
1998
1999
1998
1998 | 1221
KR,
VN,
LU,
1223
1221
1223
1221
SE,
1223
1222
1223
1222
1223 | ZA,
MC, | AM, |
| PI | CA
EP
US
US | 2000
W:
RW:
2320
1058
R:
6369
6403
2002 | 0386;
AL,
MA,
AZ,
AT,
PT,
730
549
AT,
IE,
227
583 | BE, SI, | AI
BR,
MX,
KG,
CH,
AI
CH,
LT, | CA, NO, KZ, CY, CY, LV, | 20000
CN,
NZ,
MD,
DE,
20000
DK,
FI, | 0706
CR,
PL,
RU,
DK,
0706
1213
ES,
RO
0409 | CZ,
RO,
TJ,
ES, | DM, SG, TM FI, US WG EI GB, US WG US | FR, S19 GR, S1 | 99-U
HU,
SK,
GB,
98-1
99-2
99-1
99-1
99-4
99-4
98-1
99-4 | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755
LI,
1362
S307
6983
1362
6983 | 7PP
37W
1E,
7PP
30
7PP
37W
4 LU,
7PP
37W
0
7PP
5 | 1999
JP,
UA,
IT,
1998
1999
1999
NL,
1998
1999
1999
1998
1999 | 1221
KR,
VN,
LU,
1223
1221
1223
1221
SE,
1223
1222
1223
1222
1223 | ZA,
MC, | AM, |
| PI | CA
EP
US
US | 2000
W:
RW:
2320
1058
R:
6369 | 0386;
AL,
MA,
AZ,
AT,
PT,
730
549
AT,
IE,
227
583 | BE, SI, | AI
BR,
MX,
KG,
CH,
AI
CH,
LT, | CA, NO, KZ, CY, CY, LV, | 20000
CN,
NZ,
MD,
DE,
20000
DK,
FI, | 0706
CR,
PL,
RU,
DK,
0706
1213
ES,
RO
0409 | CZ,
RO,
TJ,
ES, | DM, SG, TM, SG, TM, SG, US, WC, US, US, US, US, US, US, US, US, US, US | FR, S19 GR, S19 GR, S19 | 99-U
HU,
SK,
GB,
98-1
99-1
99-1
99-4
99-4
99-4
99-4
98-1
01-7 | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755
LI,
1362
S307
6983
1362
6983
1362
195 |
37
IN,
TZ,
TZ,
7PP
30
7PP
37W
4
LU,
7PP
5
7PP | 1999
JP,
UA,
IT,
1998
1999
1998
1999
NL,
1998
1999
1998
1998 | 1221
KR,
VN,
1223
1221
1223
1221
SE,
1223
1222
1223
1222
1223
1224 | ZA,
MC, | AM, |
| PI | WO CA EP US US US | 2000
W:
RW:
2320
1058
R:
6369
6403
2002 | 0386
AL,
MA,
AZ,
AT,
PT,
730
549
AT,
IE,
227
583
1158
871 | BE, SI, | AI
BR,
MX,
KG,
CH,
AI
CH,
LT, | CA, NO, KZ, CY, CY, CY, LV, 11 | 20000
CN,
NZ,
MD,
DE,
20000
DK,
FI, | 0706
CR,
PL,
RU,
DK,
0706
1213
ES,
RO
0409
0611 | CZ,
RO,
TJ,
ES, | DM, SG, TM FI, US GB, US | FR, S19 GR, S19 GR, S19 | 99-U
HU,
SK,
GB,
98-1
99-2
99-1
99-1
99-4
99-4
99-4
99-4
98-1
99-4 | S307
IL,
TR,
GR,
1362
3207
1362
S307
6755
LI,
1362
S307
6983
1362
6983
1362
195 |
37
IN,
TZ,
7PP
30
7PP
37W
4
LU,
7PP
57PP
7PP | 1999
JP,
UA,
IT,
1998
1999
1998
1999
1998
1999
1998
1998
1998
1998
2001 | 1221
KR,
VN,
123
1221
1223
1221
1221
SE,
1223
1222
1223
1222
1223
1222
1223
1222 | ZA,
MC, | AM, |

US 2003004344 20030102 A1 US 1998-113627PP 19981223 US 1999-469830 A319991222 2000:457044 FAN KIND DATE APPLICATION NO. DATE PATENT NO. _____ 20000706 WO 2000039102 A1 WO 1999-US30735 19991221 PΙ W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 1998-113627PP 19981223 EP 1999-965337 19991221 EP 1140862 A1 20011010 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO US 1998-113627PP 19981223 WO 1999-US30735W 19991221 US 6369227 В1 20020409 US 1999-469830 19991222 US 1998-113627PP 19981223 US 1999-469835 19991222 US 6403583 В1 20020611 US 1998-113627PP 19981223 US 2002115854 US 2001-7195 20011204 20020822 A1 US 6602871 B2 20030805 US 1998-113627PP 19981223 US 1999-469831 B119991222 US 6500855 B1 20021231 US 2002-33137 20020102 US 2003004344 **A**1 20030102 US 1998-113627PP 19981223 US 1999-469830 A319991222 OS MARPAT 133:79374 This invention relates generally to inhibitors of trypsin-like serine AΒ protease enzymes, esp. factor Xa or thrombin, pharmaceutical compns. contg. the same, and methods of using the same as anticoagulant agents for treatment and prevention of thromboembolic disorders. ANSWER 35 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN L3 2000:368323 CAPLUS AN DN 133:17481 Preparation of IL-5 inhibiting 6-azauracil derivatives ΤI Lacrampe, Jean Fernand Armand; Ligny, Yannick; Freyne, Eddy Jean Edgard; TN Deroose, Frederik Dirk Janssen Pharmaceutica N.V., Belg. PA PCT Int. Appl., 43 pp. SO CODEN: PIXXD2 DTPatent LА English FAN.CNT 1 APPLICATION NO. DATE KIND DATE PATENT NO. WO 2000031053 A1 20000602 WO 1999-EP9154 19991122 WO 2000031053 PΙ W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

OS

GI

| | | RW: | DK, | ES, | FI, | FR, | - | GR, | IE, | IT, | LU, | MC, | NL, | PT, | | CH,
BF, | | - |
|---|--------|--------|-------------|-------|------|--------|-------|------|-----|-------|------|------|------|------|------|------------|-----|-----|
| | | | | | | | | | | E | P 19 | 98-2 | 0392 | 9 A | 1998 | 31123 | | |
| | EP | 11334 | 483 | | A | 1 : | 2001 | 0919 | | E | P 19 | 99-9 | 6333 | 2 | 1999 | 1122 | | |
| | | 11334 | | | | | | | | | | | | | | | | |
| | | | AT, | BE, | CH, | DE, | | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | <u>ጉሙ</u> , | or, | יייי | T1 / 1 | LT, | NO | | ים | D 10 | 08-2 | 0303 | ο 7\ | 1009 | 31123 | | |
| | | | | | | | | | | | | | • | | | 91122 | | |
| | TD | 20025 | 5202 | 0.0 | m' | 2 . | 2002 | 0017 | | | | | | - | | | | |
| | JP | 20023 | 3303: | 90 | 14 | ٠ ، | 20021 | 0911 | | | | | | | | 31123 | | |
| | | | | | | | | | | _ | | | | | | 91122 | | |
| | 77.7.7 | 7504 | 0.5 | | ъ, | 2 | 2002 | 0417 | | • • • | | | | | | 91122 | | |
| | ΑU | 75940 | 05 | | В | ۷ . | 2003 | 041/ | | | | | | | | 31123 | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | 0000 | 0515 | | | | | | | | 91122 | | |
| | AΤ | 23828 | 87 | | E | • | 2003 | 0515 | | | | | | _ | | 91122 | | |
| | | | | | | | | | | | | | | | | 31123 | | |
| | | | | | | _ | | | | • • • | | | | | | 91122 | | |
| | US | 64983 | 158 | | В. | 1 | 2002 | 1224 | | | | | | - | | 10522 | | |
| | | | | | | | | | | | | | | | | 31123 | | |
| | | | | | _ | | | | | W |) 19 | 99-E | P915 | 4 W | T998 | 91122 | | |
| ; | MAI | RPAT : | 133: | 1748: | 1 | | | | | | | | | | | | | |

$$\begin{bmatrix} R^4 \\ q \\ R^2 - X^1 \end{bmatrix} \xrightarrow{R} \begin{bmatrix} R^1 \\ p \\ N \end{bmatrix} \xrightarrow{N} = 0$$

The title compds. [I; p = 0-3; q = 0-4; AB = (CH2)r, (CH2)tO, (CH2)tS(O)u, (CH2)tNR3; r = 2-4; t = 1-3; u = 0-2; X1 = 0, S, NR3, a direct bond; R1, R4 = alkyl, halo, polyhaloalkyl, etc.; R2 = aryl, heteroaryl, cycloalkyl, etc.; R3 = H, alkyl], useful in treating eosinophil-dependent inflammatory diseases, were prepd. and formulated. E.g., a multi-step synthesis of

Patel

09951006.3 Page 50

azauracil II which showed 70.5% inhibition of IL-5 prodn. at 1x10-6 M, was given.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 36 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- 2000:241203 CAPLUS
- DN 132:265207
- TI Preparation of 4-anilinoquinazolines and 4-anilinoquinolines as inhibitors of cytokine mediated disease
- IN Cumming, John Graham
- PA Zeneca Limited, UK
- SO PCT Int. Appl., 101 pp. CODEN: PIXXD2
- DTPatent
- LA English

| FAN.CNT 1 PATENT NO. | | | | | | | | | | | | | | | | | | |
|----------------------|------------|--------|------|-----|-----|--------|------|------|-----|------------|------|----------------|---------|------|----------------|------|-----|-----|
| | PA: | PENT . | NO. | | | ND
 | DATE | | | A. | PPLI | CATI | N NC | ο. | DATE | | | |
| PI | WO | 2000 | 0204 | 02 | | | 2000 | 0413 | | W(| 0 19 | 99-G | B322 | 0 | 1999 | 0927 | | |
| | | | | | | | | | | | | | | | CH, | CN, | CR, | CU, |
| | | | | - | - | - | - | | | - | | | | | HR, | | | |
| | | | | | | | | | | | | | | | LT, | | | |
| | | | | | | | | | | | | | | | SE, | | | |
| | | | | | | | | | | | | | | | ZW, | | | |
| | | | KG, | KZ, | MD, | RU, | ТJ, | TM | | | | | | | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, | DE, |
| | | | DK, | ES, | FΙ, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, |
| | | | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | | | | | | | | | |
| | | | | | | | | | | | | | | | 1998 | | | |
| | | | | | | | | | | | | | | | 1999 | | | |
| | CA | 2341 | 374 | | A | A | 2000 | 0413 | | | | | | | 1999 | | | |
| | | | | | | | | | | | | | | | 1998: | | | |
| | | | | | | | | | | | | 99-6 | | | 1999 | | | |
| | AU 9961064 | | | | | _ | | | | | | | - | | 1999 | | | |
| | | | | | A. | | 2000 | | | A | J 19 | 99–6: | 1064 | | 1999 | 0927 | | |
| | ΑU | 7615 | 52 | | B | 2 | 2003 | 0605 | | C 1 | - 10 | 00 0 | 1 2 2 0 | ~ | 1000 | 1001 | | |
| | | | | | | | | | | | | 98-2.
99-6: | | | 1998:
1999: | | | |
| | | | | | | | | | | | | | | | 1999 | | | |
| | ממ | 9914 | 162 | | 7\ | | 2001 | 0626 | | | | 99-1 | | | 19990 | | | |
| | М | 3314 | 102 | | A | | 2001 | 0020 | | | | | | | 1998: | | | |
| | | | | | | | | | | | | 99-6 | | | 19990 | | | |
| | | | | | | | | | | | | | | | 19990 | | | |
| | EP | 1117 | 653 | | A. | 1 | 2001 | 0725 | | | | | | | 1999 | | | |
| | EP | 1117 | 653 | | B: | 1 | 2003 | 0205 | | | | | | | | | | |
| | | R: | AT, | | | | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | IE, | SI, | LT, | LV, | FI, | RO | | | | | | | | | | |
| | | | | | | | | | | G) | В 19 | 98-2 | 1338 | Α | 1998 | 1001 | | |
| | | | | | | | | | | | | 99-6 | | | 1999 | | | |
| | | | | | | | | | | | | | | | 1999 | | | |
| | JΡ | 2002 | 5265 | 38 | T | 2 | 2002 | 0820 | | | | | | | 19990 | | | |
| | | | | | | | | | - | _ | | | | 1998 | | | | |
| | | | | | | | | | | | | 99-6 | _ | | 19990 | | | |
| | | | | | | | | | | | | | | | 19990 | | | |
| | ΑT | 2322 | 05 | | E | | 2003 | 0215 | | | | 99-9 | | | 19990 | - | | |

GB 1998-21338 A 19981001

<12/10/2003> Patel

| | | | • | | | | |
|----|------------|----|----------|----|-------------|---|----------|
| | | | | | 1999-6564 | | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| NZ | 510210 | A | 20030630 | NZ | 1999-510210 | | 19990927 |
| | | | | GB | 1998-21338 | Α | 19981001 |
| | | | | GΒ | 1999-6564 | Α | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| ES | 2191462 | Т3 | 20030901 | ES | 1999-947686 | | 19990927 |
| | | | | GB | 1998-21338 | Α | 19981001 |
| | | | | GB | 1999-6564 | Α | 19990323 |
| ZA | 2001002187 | Α | 20020618 | zA | 2001-2187 | | 20010315 |
| | | | | GB | 1998-21338 | A | 19981001 |
| US | 6593333 | B1 | 20030715 | US | 2001-787883 | | 20010323 |
| | | | | GB | 1998-21338 | Α | 19981001 |
| | | | | GB | 1999-6564 | Α | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| NO | 2001001631 | Α | 20010521 | NO | 2001-1631 | | 20010330 |
| | | | | GB | 1998-21338 | Α | 19981001 |
| | | | | GB | 1999-6564 | Α | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| US | 2003216417 | A1 | 20031120 | US | 2003-441084 | | 20030520 |

Page 51

OS MARPAT 132:265207

09951006.3

$$\begin{bmatrix} \mathbb{R}^2 \\ \mathbb{R}^3 \\ \mathbb{R}^5 \end{bmatrix}_{\mathbb{R}}^{\mathbb{R}^3}$$

Patel

GB 1998-21338 A 19981001

WO 1999-GB3220 W 19990927 US 2001-787883 A320010323

A 19990323

GB 1999-6564

The title compds. [I; G = N, CH; R1 = OH, halo, CF3, etc.; R2, R3 = H, halo, alkyl, etc.; R4 = H, OH, alkyl, etc.; R5 = H, halo, CF3; m = 1-3; q= 0-4] and their pharmaceutically acceptable salts or in vivo cleavable esters, useful in the treatment of diseases or medical conditions mediated by cytokines, were prepd. and formulated. E.g., a multi-step synthesis of II which showed IC50 of 0.2 .mu.M against p38.alpha. kinase and IC50 of 5.2 .mu.M against TNF.alpha. prodn., was given.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

```
ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 37 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
     2000:227634 CAPLUS
ΑN
DN
     132:265091
     Preparation of N-(benzamidophenyl)pyridinecarboxamides and analogs as
     cytokine production inhibitors
     Brown, Dearg Sutherland; Brown, George Robert
IN
PA
     Zeneca Limited, UK
     PCT Int. Appl., 138 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
     ------
                     ____
                                          -----
    WO 2000018738 Al 20000406 WO 1999-GB3144 19990921
PI
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
            MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           GB 1998-20770 A 19980925
                                           GB 1998-26938 A 19981209
                                           GB 1999-5969
                                                         A 19990317
     CA 2340454
                      AΑ
                            20000406
                                           CA 1999-2340454 19990921
                                           GB 1998-20770 A 19980925
                                           GB 1998-26938 A 19981209
                                           GB 1999-5969 A 19990317
                                           WO 1999-GB3144 W 19990921
                            20000417
                                           AU 1999-61034
     AU 9961034
                      A1
                                                           19990921
     AU 761361
                      B2
                            20030605
                                           GB 1998-20770 A 19980925
                                           GB 1998-26938 A 19981209
                                           GB 1999-5969 A 19990317
                                           WO 1999-GB3144 W 19990921
                            20010612
                                           BR 1999-13947
     BR 9913947
                     Α
                                                           19990921
                                           GB 1998-20770 A 19980925
                                           GB 1998-26938 A 19981209
                                           GB 1999-5969
                                                          A 19990317
                                           WO 1999-GB3144 W 19990921
                                           EP 1999-947653
                            20010718
     EP 1115707
                      A1
                                                            19990921
     EP 1115707
                      В1
                            20031112
```

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

Patel <12/10/2003>

IE, SI, LT, LV, FI, RO

| | | | | GB | 1998-20770 | A | 19980925 |
|----|------------|----|----------|----|-------------|---|----------|
| | | | | GB | 1998-26938 | Α | 19981209 |
| | | | | GB | 1999-5969 | Α | 19990317 |
| | | | | WO | 1999-GB3144 | W | 19990921 |
| JP | 2002525358 | T2 | 20020813 | JΡ | 2000-572198 | | 19990921 |
| | | | | GΒ | 1998-20770 | Α | 19980925 |
| | | | | GB | 1998-26938 | Α | 19981209 |
| | | | | GB | 1999-5969 | Α | 19990317 |
| | | | | WO | 1999-GB3144 | W | 19990921 |
| NZ | 509836 | A | 20030630 | NZ | 1999-509836 | | 19990921 |
| | | | | GB | 1998-20770 | Α | 19980925 |
| | | | | GB | 1998-26938 | Α | 19981209 |
| | | | | GΒ | 1999-5969 | Α | 19990317 |
| | | | | WO | 1999-GB3144 | W | 19990921 |
| ZA | 2001002185 | Α | 20020618 | ZΑ | 2001-2185 | | 20010315 |
| | | | | GΒ | 1998-20770 | Α | 19980925 |
| NO | 2001001492 | A | 20010523 | NO | 2001~1492 | | 20010323 |
| | | | | GB | 1998-20770 | Α | 19980925 |
| | | | | GB | 1998-26938 | A | 19981209 |
| | | | | GB | 1999-5969 | A | 19990317 |
| | | | | WO | 1999-GB3144 | W | 19990921 |
| US | 6455520 | B1 | 20020924 | US | 2001-787882 | | 20010323 |
| | | | | GB | 1998-20770 | Α | 19980925 |
| | | | | GB | 1998-26938 | | 19981209 |
| | | | | GB | 1999-5969 | А | 19990317 |
| | | | | WO | 1999-GB3144 | W | 19990921 |

OS MARPAT 132:265091 GI

AB R4Z4ZCONHZ1NHCOZ2R2 [I; R2 = Z3R3; R3 = (un)substituted heteroaryl; R4 = (di)(alkyl)amino(alkyl), heterocyclyl(alkyl), heteroaryl(alkyl), etc.; Z = (un)substituted phenylene; Z1= 2-halo- or -alkyl-1,5-phenylene; Z2 = bond or (CH2)1-4; Z3 = bond, O, NH, alkyleneoxy, alkyleneamino, etc.; Z4 = bond, alkylene(oxy), alkyleneamino,, etc.] were prepd. as p38 kinase inhibitors. Thus, 3-(ClCH2)C6H4COCl was amidated by 2-methyl-5-nitroaniline and the product aminated by 1-methylpiperazine to give, after redn. and pyridine-3-carbonyl chloride amidation, title compd. II. Data for biol. activity of I were given.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 38 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2000:53594 CAPLUS
- DN 132:93214
- TI Preparation of aminopyridinealkanamides and analogs as nitric oxide

Patel

```
synthase inhibitors and reactive oxygen scavengers
     Chabrier De Lassauniere, Pierre-Etienne; Auvin, Serge; Harnett, Jerry;
     Pons, Dominique; Ulibarri, Gerard; Bigg, Dennis
PA
     Societe de Conseils de Recherches et d'Applications Scientifiques
      (S.C.R.A.S, Fr.
SO
     PCT Int. Appl., 88 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     French
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                                APPLICATION NO. DATE
                               ______
                                                ______
                               20000120 WO 1999-FR1610 19990705
     WO 2000002860 A1
PΙ
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
              MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
              ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
              CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                FR 1998-8732
                                                                 A 19980708
                                                FR 1999-4133
                                                               A 19990402
     FR 2780971
                         A1
                               20000114
                                                FR 1998-8732
                                                                   19980708
                         B1
     FR 2780971
                               20010928
                         A1
     FR 2791674
                               20001006
                                                FR 1999-4133
                                                                   19990402
                               20000120
                                                CA 1999-2337258 19990705
                         AA
     CA 2337258
                                                FR 1998-8732 A 19980708
                                                FR 1999-4133
                                                               A 19990402
                                                WO 1999-FR1610 W 19990705
     AU 9946223
                         A1
                               20000201
                                                AU 1999-46223 19990705
     AU 756221
                         B2
                               20030109
                                                FR 1998-8732
                                                                 A 19980708
                                                FR 1999-4133
                                                               A 19990402
                                                WO 1999-FR1610 W 19990705
     EP 1095020
                               20010502
                                                EP 1999-929395 19990705
                         A1
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                                                FR 1998-8732
                                                                 A 19980708
                                                FR 1999-4133
                                                                 A 19990402
                                                WO 1999-FR1610 W 19990705
     JP 2002520317
                         T2
                               20020709
                                                JP 2000-559091 19990705
                                                FR 1998-8732
                                                               A 19980708
                                                FR 1999-4133
                                                               A 19990402
                                                WO 1999-FR1610 W 19990705
     TW 509677
                               20021111
                         В
                                                TW 1999-88111513 19990818
                                                FR 1998-8732
                                                               A 19980708
                                                FR 1999-4133
                                                               A 19990402
     NO 2001000031
                         Α
                               20010105
                                                NO 2001-31
                                                                 20010103
                                                FR 1998-8732
                                                                 A 19980708
                                                FR 1999-4133
                                                               A 19990402
                                                WO 1999-FR1610 W 19990705
     MARPAT 132:93214
OS
GΙ
```

AB RZZ1Z2NH2 [I; R = free-radical scavenging moiety, e.g., (un)substituted Ph, -naphthyl, 2,5,7,8-tetramethyl-6-hydroxy- or -alkoxy-2H-1-benzopyran-2-yl, etc.; Z = NHCO, COZ3, etc.; Z1 = alk(en)ylene, (CH2)nNR13(CH2)p, etc.; R13 = H or alkyl; Z2 = (un)substituted pyridine-m,6-diyl; Z3 = (homo)piperazinediyl; m = 2-5; n,p = 0-6] were prepd. Thus, 6-(2,5-dimethylpyrrolo)-4-methyl-2-pyridinepentanoic acid was amidated by 4-amino-2,6-bis(1,1-dimethylethyl)phenol (prepn. each given) and the product deprotected to give title compd. II. Data for biol. activity of I were given.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 39 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1999:511140 CAPLUS
- DN **131:157771**
- TI Preparation of five-membered, benzo-condensed heterocycles as antithrombotics
- IN Ries, Uwe; Hauel, Norbert; Mihm, Gerhard; Priepke, Henning; Binder, Klaus; Stassen, Jean Marie; Wienen, Wolfgang; Zimmermann, Rainer
- PA Boehringer Ingelheim Pharma Kg, Germany
- SO PCT Int. Appl., 250 pp.
- CODEN: PIXXD2
 DT Patent
- LA German

| FAN. | FAN.CNT 2 PATENT NO. KIND DATE APPLICATION NO. DATE | | | | | | | | | | | | | | | | | | |
|------|---|-------|-----|-----|--------------|-----|------|------|-----|-----|-----------|------|-------|--------|--------|------|-----|-----|--|
| | PA: | LENT. | NO. | | KTI | | DATE | | | |
5577(| | |).
 | DA'I'E | | | | |
| PI | WO | 9940 | 072 | | | | 1999 | 0812 | | | | | | | 1999 | 0128 | | | |
| | | W: | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, | |
| | | | DK, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | |
| | KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, | | | | | | | MK, | MN, | | | | | | | | | | |
| | · · | | | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | |
| | TR, TT, UA, | | | | | | | | | | | | | | | | | TM | |
| | RW: GH, GM, KE | | | ΚE, | LS, | MW, | SD, | SZ, | UG, | ZW, | AT, | BE, | CH, | CY, | DE, | DK, | ES, | | |
| | | | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | |
| | | | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | |
| | | | | | | | | | | | | | | | 199 | | | | |
| | | | | | | | | | | _ | | | | | 199 | | 0 | | |
| | | 1980 | | | A. | _ | 1999 | | | _ | | | | | 1998 | | | | |
| | | 1983 | | | | _ | 2000 | | | _ | E 19 | 98-1 | 9834: | 325 | 1998 | 0730 | | | |
| | CA | 2319 | 494 | | \mathbf{A} | 4 | 1999 | 0812 | | C | A 199 | 99-2 | 3194 | 94 | 1999 | 0128 | | | |
| | | | | | | | | | | D | E 199 | 98-1 | 9804 | 085A | 199 | 8020 | 3 | | |
| | | | | | | | | | | D | E 199 | 98-1 | 9834: | 325A | 199 | 8073 | 0 | | |
| | WO 1999-EP537 W 19990128 | | | | | | | | | | | | | | | | | | |

```
09951006.3
                               Page 56
     AU 9927201 A1
                              19990823
                                              AU 1999-27201
                                                                19990128
                                              DE 1998-19804085A 19980203
                                              DE 1998-19834325A 19980730
                                              WO 1999-EP537 W 19990128
     EP 1060166
                              20001220
                                              EP 1999-907437 19990128
                       A1
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                                              DE 1998-19804085A 19980203
                                              DE 1998-19834325A 19980730
                                              WO 1999-EP537 W 19990128
                                              JP 2000-530502 19990128
     JP 2002502844
                    Т2
                              20020129
                                              DE 1998-19804085A 19980203
                                              DE 1998-19834325A 19980730
                                              WO 1999-EP537 W 19990128
PATENT FAMILY INFORMATION:
FAN 1999:505930
                      KIND DATE
     PATENT NO.
                                              APPLICATION NO. DATE
    DE 19804085 A1 19990805 DE 1998-19804085 19980203
CA 2319494 AA 19990812 CA 1999-2319494 19990120
PΙ
                                              DE 1998-19804085A 19980203
                                              DE 1998-19834325A 19980730
                                              WO 1999-EP537 W 19990128
     WO 9940072 A1 19990812 WO 1999-EP537 19990128
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
         MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
              CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                              DE 1998-19804085A 19980203
                                              DE 1998-19834325A 19980730
     AU 9927201 A1 19990823
                                              AU 1999-27201 19990128
                                              DE 1998-19804085A 19980203
                                              DE 1998-19834325A 19980730
                                              WO 1999-EP537 W 19990128
     EP 1060166 A1 20001220
                                              EP 1999-907437 19990128
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                                              DE 1998-19804085A 19980203
                                              DE 1998-19834325A 19980730
                                              WO 1999-EP537 W 19990128
                                              JP 2000-530502 19990128
     JP 2002502844
                       Т2
                              20020129
                                              DE 1998-19804085A 19980203
                                              DE 1998-19834325A 19980730
                                              WO 1999-EP537 W 19990128
                                              US 1999-243200 19990202
     US 6114532 A 20000905
                                              DE 1998-19804085A 19980203
```

US 1998-77694P P 19980312 DE 1998-19834325A 19980730

Patel <12/10/2003>

MARPAT 131:157771

OS GI

$$R^{1}Z$$
 X
 A
 R^{2}
 R^{2}
 R^{2}
 R^{2}

Title compds. [I; R = 5-C6H5SO2NH, 6-C6H5SO2NH, 5-C6H5NHSO2, 5-C6H5SO2N(CH2COOEt), 5-C6H5SO2N(CH3), 5-C6H5N(CH2CH2CH2CH2COOEt)CO, 5-C6H5, CH3N(C6H5)CO, 8; R1 = H, 7-CH3, 3-Br, 3-EtO; R2 = C(:NH)NH2; A = CH2, NH; X = CH, MeN, EtoCoCH2CH2N, O, S, NCH2CO2H; Y = N, CH, CH:CH; Z = CH, N; dotted bond = single, double in relation to X; A is attached at 2,or 8 position depending on the heterocyclic ring] and their tautomers, stereoisomers, mixts. and their physiol. compatible salts with inorg. or org. acids or bases are prepd. and title compds in which R2 is a cyano group, present valuable intermediate products for the prodn. of the remaining compds. of the general formula I, with R2 is amidino, which have valuable pharmacol. properties, esp. an antithrombotic activity. Thus, the title compd. II was prepd.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 40 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1999:421639 CAPLUS
- DN 131:58657
- TI Thiourea and benzamide compounds, compositions and methods of treating or preventing inflammatory diseases and atherosclerosis
- IN Connor, David Thomas; Roark, William Howard; Sexton, Karen; Sorenson, Roderick Joseph
- PA Warner-Lambert Company, USA
- SO PCT Int. Appl., 226 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

| | PATEN | T NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON N | ο. | DATE | | | |
|----|-------|--------|-----|-----|-------|------|------|--------------------------|-----|------|------|------|-----|------|-----|-----|-----|
| ΡI | WO 00 | | | |
1 | 1000 | 0701 | | - | | | | | | | | |
| ĽΙ | | | | | | | | WO 1998-US24688 19981120 | | | | | | | | | |
| | W | : AL, | AU, | BA, | BB, | BG, | BR, | CA, | CN, | CU, | CZ, | EE, | GE, | HR, | HU, | ID, | IL, |
| | | IS, | JP, | ΚP, | KR, | LC, | LK, | LR, | LT, | LV, | MG, | MK, | MN, | MX. | NO. | NZ, | PL, |
| | | RO, | SG, | SI, | SK, | SL, | TR, | TT, | UA, | US, | UZ, | VN. | YU, | AM. | AZ. | BY. | KG. |
| | | KZ, | MD, | RU, | ТJ, | TM | | | | • | • | • | • | • | - , | -, | , |
| | R | W: GH, | GM, | ΚE, | LS, | MW, | SD, | SZ, | UG, | ZW, | AT, | BE, | CH, | CY, | DE. | DK. | ES. |
| | | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, |

Patel

| | CM, | GA, | GN, G | W, ML, MR, | NE, | SN, TD, TG |
|----|----------|-----|-------|------------|-----|-------------------------------------|
| | | | | | | US 1997-68604P P 19971223 |
| CA | 2300197 | | AA | 19990701 | | CA 1998-2300197 19981120 |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| ΑU | 9915297 | | A1 | 19990712 | | |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| BR | 9814327 | | A | 20001003 | | BR 1998-14327 19981120 |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| EP | | | | | | EP 1998-959510 19981120 |
| | R: AT, | BE, | CH, D | E, DK, ES, | FR, | GB, GR, IT, LI, LU, NL, SE, MC, PT, |
| | IE, | SI, | LT, L | V, FI, RO | | |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| JP | 20015262 | 55 | T2 | 20011218 | | JP 2000-525370 19981120 |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| NZ | 502963 | | Α | 20020628 | | |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| ZA | 9811805 | | Α | 19990629 | | |
| | | | | | | US 1997-68604P P 19971223 |
| MX | 20000187 | 0 | A | 20001109 | | MX 2000-1870 20000223 |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| US | 6268387 | | B1 | 20010731 | | |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| | | | | 20011018 | | US 2001-858089 20010515 |
| US | 6528528 | | B2 | 20030304 | | |
| | | | | | | US 1997-68604P P 19971223 |
| | | | | | | WO 1998-US24688W 19981120 |
| | | | | | | US 2000-529135 A320000405 |

OS MARPAT 131:58657

GI

$$R^{2}$$
 $X-R^{5}$
 R^{4}
 Y
 Q
 I
 MeO
 NH_{2}
 NH_{2}
 II

The invention provides compds. I [X = NH, O, S, NHC(:S)NH, CONH, NHCO, (CH2)n, etc., or their alkyl derivs.; n = 0-3; Y = NH, CONH, NHCO, CH2CH2, NHSO2, etc., or their alkyl derivs.; Q = alkyl, (un)substituted Ph or heteroaryl, (di)(alkyl)amino, or cycloalkyl; R1-R4 = H, alkoxy, alkyl, halo, OH, CF3, cyano, (un)substituted (hetero)aryl, etc.; R5 = H, alkyl,

Patel

<12/10/2003>

(un) substituted heteroaryl, naphthyl, benzyl, or dansyl; with several provisos]. The invention also provides methods of treating or preventing inflammation or atherosclerosis, and a pharmaceutical compn. that contains a compd. I. The compds. are inhibitors of 15-lipoxygenase (15-LO), and act as inhibitors of the chemotaxis of monocytes. Approx. 280 synthetic examples are given. For instance, amidation of 3-nitro-4-methoxybenzoic acid with 3,4-dichloroaniline using oxalyl chloride and DMF catalyst in THF/CH2Cl2 mixt., followed by hydrogenation over Raney Ni, gave title compd. II. The latter had an IC50 of 10 nM against human 15-LO in vitro.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 41 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
     1999:325902 CAPLUS
ΑN
DN
     130:352546
     Preparation of amides containing leucine or methionine for inhibition of
TI
     the interaction of vascular cell-adhesion molecule-1 (VCAM-1) and
      fibronectin with integrin very late antigen 4 (.alpha.4.beta.1)
IN
     Brittain, David Robert; Johnstone, Craig
     Zeneca Limited, UK
     PCT Int. Appl., 74 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN. CNT 1
     PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
                         ----
     WO 9924398 A2
WO 9924398 A3
                                               WO 1998-GB3334 19981109
PΙ
                                19990520
     WO 9924398 A3 19990805
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,

CP GF GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
              KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
          NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
              CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                 GB 1997-23789 A 19971112
                                                 CA 1998-2308716 19981109
     CA 2308716
                                19990520
                          AA
                                                 GB 1997-23789 A 19971112
                                                 WO 1998-GB3334 W 19981109
                                                 AU 1999-10420
     AU 9910420
                          A1
                                19990531
                                                                     19981109
                                                 GB 1997-23789 A 19971112
                                                 WO 1998-GB3334 W 19981109
     EP 1030835
                          A2
                                20000830
                                                 EP 1998-952872
                                                                     19981109
     EP 1030835
                          В1
                                20030122
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
                                                 GB 1997-23789 A 19971112
                                                 WO 1998-GB3334 W 19981109
     JP 2001522831
                          T2
                                20011120
                                                 JP 2000-520412
                                                                    19981109
                                                 GB 1997-23789 A 19971112
                                                 WO 1998-GB3334 W 19981109
     AT 231488
                          E
                                20030215
                                                 AT 1998-952872
                                                                     19981109
                                                 GB 1997-23789 A 19971112
                                                 WO 1998-GB3334 W 19981109
     ZA 9810330
                        Α
                                19990512
                                                 ZA 1998-10330
                                                                    19981111
```

| | NO 2000002158 | A | 20000711 | | 1997-23789
2000-2158 | A | 19971112
20000427 |
|----------|-------------------|----|----------|----|-------------------------|---|----------------------|
| | | | | GB | 1997-23789 | Α | 19971112 |
| | | | | WO | 1998-GB3334 | W | 19981109 |
| | US 6344570 | В1 | 20020205 | US | 2000-554224 | | 20000711 |
| | | | | GB | 1997-23789 | A | 19971112 |
| | | | | WO | 1998-GB3334 | W | 19981109 |
| OS
GT | MARPAT 130:352546 | | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I; R1 = II (in the para or meta position); R2, R3 = H, N02, alkyl, etc.; R2 and R3 together with the Ph to which they are attached form a 9-10 membered bicyclic ring system; R4 = alkyl; R5 = H, alkyl; R6 = alkyl, alkylcycloalkyl, alkylalkoxyl, etc.; R7 = alkyl, alkoxylcarbonyl, alkenyl, etc.; R8 = (un)substituted aryl, heteroaryl, bicyclic heteroaryl ring system linked to the nitrogen via a ring carbon, etc.; R9, R10 = H, alkyl; NR8R9 = dihydroindolyl, dihydroquinolinyl; R11 = CO2H, tetrazolyl, alkyl sulfonylcarbamyl, sulfo, sulfino; Y = O, S, SO2; m = 0-1; n = 0-4; with the proviso that when m and n cannot both be 0 and when m = 1, n = 0] and their pharmaceutically acceptable salts, useful in the treatment of multiple sclerosis, rheumatoid arthritis, asthma, coronary artery disease and psoriasis, were prepd. E.g., a multi-step synthesis of amide III was given. Compds. I are effective at 0.1-15 mg/kg/day.

```
L3 ANSWER 42 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 1999:311177 CAPLUS

DN 130:352091

TI Preparation of ureidophenylacetanilides and analogs as integrin-mediated cell adhesion inhibitors

IN Astles, Peter Charles; Clark, David Edward; Collis, Alan John; Cox, Paul Joseph; Eastwood, Paul Joseph; Harris, Neil Victor; Lai, Justine Yeun Quai; Morley, Andrew David; Porter, Barry

PA Rhone-Poulenc Rorer Limited, UK

SO PCT Int. Appl., 125 pp. CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

| Truv. | PATENT NO. | | | | KIND DATE | | | | APPLICATION NO. | | | | ٥. | DATE | | | | | |
|-------|------------|------|---------|-----|-------------|-----|-----|-----|-----------------|----------|------|--------|------|------|------|------|-----|-----|------------------------|
| PI | WO | 9923 |
063 | | A1 19990514 | | | M |
0 19 |
98-G | B329 | 4 | 1998 | 1102 | | | | | |
| | | W: | ΑL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | ВG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, | |
| | | | DK, | EE, | ES, | FΙ, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IS, | JP, | ΚE, | |
| | | | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | ΜW, | |
| | | | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | |
| | | | TT, | UA, | UG, | US, | UZ, | VN, | YU, | ZW, | AM, | AZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | $\mathbf{M}\mathbf{T}$ |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | SD, | SZ, | UG, | ΖW, | AT, | BE, | CH, | CY, | DE, | DK, | ES, | |
| | | | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | |
| | | | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | |
| | | | | | | | | | | G | B 19 | 97 - 2 | 3072 | Α | 1997 | 1031 | | | |

US 1997-69695P P 19971216

```
GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
CA 2303848
           AA
                                      CA 1998-2303848 19981102
                       19990514
                                      GB 1997-23072 A 19971031
                                      US 1997-69695P P 19971216
                                      GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
                                      WO 1998-GB3294 W 19981102
AU 9897550
                                      AU 1998-97550
                                                       19981102
               A1
                       19990524
AU 748041
                  B2
                       20020530
                                      GB 1997-23072 A 19971031
                                      US 1997-69695P P 19971216
                                      GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
                                      WO 1998-GB3294 W 19981102
ZA 9810004
                  Α
                       20000502
                                      ZA 1998-10004
                                                       19981102
                                      GB 1997-23072 A 19971031
                                EP 1998-951596 19981102
EP 1027328
                       20000816
                  A1
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
        SI, FI, RO
                                      GB 1997-23072 A 19971031
                                      US 1997-69695P P 19971216
                                      GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
                                      WO 1998-GB3294 W 19981102
                                      BR 1998-13331 19981102
GB 1997-23072 A 19971031
BR 9813331
                 Α
                       20000822
                                      US 1997-69695P P 19971216
                                      GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
                                      WO 1998-GB3294 W 19981102
JP 2001521921
                  Т2
                       20011113
                                      JP 2000-518939 19981102
                                      GB 1997-23072 A 19971031
                                      US 1997-69695P P 19971216
                                      GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
                                      WO 1998-GB3294 W 19981102
NZ 503407
                 Α
                       20020828
                                      NZ 1998-503407 19981102
                                      GB 1997-23072 A 19971031
                                      US 1997-69695P P 19971216
                                      GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
                                      WO 1998-GB3294 W 19981102
US 6479519
                  В1
                       20021112
                                      US 2000-558812
                                                     20000426
                                      GB 1997-23072 A 19971031
                                      US 1997-69695P P 19971216
                                      GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
                                      WO 1998-GB3294 A119981102
NO 2000002276
                Α
                       20000525
                                      NO 2000-2276
                                                       20000428
                                      GB 1997-23072 A 19971031
                                      US 1997-69695P P 19971216
                                      GB 1998-14276 A 19980701
                                      US 1998-104287PP 19981014
                                      WO 1998-GB3294 W 19981102
MARPAT 130:352091
R1NHCONHR2 [I; R1 = (un)substituted Ph or -2-pyridyl; R2 = ZZ1ZZZ3R; R =
```

Patel <12/10/2003>

OS

AB

CO2H, CONY1Y2, etc.; Y1,Y2 = H, (cyclo)alk(en)ylene, (hetero)aryl, etc.; NY1Y2 = heterocyclyl; Z = (un)substituted phenylene, -pyridinediyl, -pyrimidinediyl, etc.; Z1 = CH2CONR4, etc.; R4 = H or alkyl; Z2 = (hetero)arylene; Z3 = (un)substituted alkylene, etc.], which regulate interaction of VCAM-1 and fibronectin with integrin .alpha.4.beta.1, were prepd. Thus, (R)-2-MeC6H4NHCONHZCH2CONHZ2CH(NHSO2Me)CH2CO2H (Z = 2-methoxy-1,4-phenylene, Z2 = 1,4-phenylene) was prepd. in 9 steps from 2-nitroanisole. Data for biol. activity of I were given.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L3 ANSWER 43 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 1999:34888 CAPLUS

DN 130:66491

TI Preparation of urea derivatives as inhibitors of p38

IN Salituro, Francesco Gerald; Bemis, Guy W.; Green, Jeremy; Kofron, James L.

PA Vertex Pharmaceuticals Incorporated, USA

SO PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PAT | TENT I | NO. | | KIND DATE | | | | APPLICATION NO. DATE | | | | | | | | | |
|----|-----------------------|--------|------------|------|-----------|-----|---------------------------|-------|----------------------|-----|------|-------|------|--------------|------|------|-----|-----|
| ΡI | WO | 9900 | 357 | | A | 1 | 1999 | 0107 | | W | 0 19 | 98-U: | 5134 | 96 | 1998 | 0629 | | |
| | | W: | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, |
| | | | DK, | EE, | ES, | FI, | GB, | GE, | GH, | GM, | GW, | HU, | ID, | IL, | IS, | JP, | ΚE, | KG, |
| | | | KP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | ΜX, |
| | | | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, |
| | | | UA, | UG, | UΖ, | VN, | YU, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | SD, | SZ, | UG, | ŹW, | ΑT, | BE, | CH, | CY, | DE, | DK, | ES, |
| | | | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, |
| | | | CM, | GΑ, | GN, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | |
| | | | | | | | | | | U: | 3 19 | 97-88 | 3416 | \mathbf{A} | 1997 | 0627 | | |
| | បន | 6093 | 742 | | Α | | 2000 | 0725 | | U: | 3 19 | 97-88 | 3416 | 0 | 1997 | 0627 | | |
| | ΑU | 9883 | 776 | | A | 1 | 1999 | 0119 | | A | J 19 | 98-83 | 3776 | | 1998 | 0629 | | |
| | | | | | | | | | | U: | 3 19 | 97-8 | 3416 | A 0 | 1997 | 0627 | | |
| | | | | | | | | | | M(| 19 | 98-U | 5134 | 96W | 1998 | 0629 | | |
| | EP 993441 A1 20000419 | | | 0419 | | E | P 19 | 98-93 | 3419 | 5 | 1998 | 0629 | | | | | | |
| | | R: | AT,
IE, | | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | , | | | | | | US 1997-884160 A 19970627 | | | | | | | | | | | |

OS MARPAT 130:66491

The title compds. WX1C(:Y)X2Z [W = (un)substituted satd., partially satd. or arom. monocyclic or bicyclic ring system optionally comprising up to 4 heteroatoms; Y = O, etc.; X1, X2 = O, S, etc.; Z = cycloalkyl, etc.] are prepd. Compds. of this invention are inhibitors of p38, a mammalian protein kinase involved in cell proliferation, cell death and response to extracellular stimuli. In in vitro assays for inhibition of phosphorylation of EGF receptor peptide, compds. of this invention showed IC50 values of 0.14 .mu.M to 19 .mu.M.

WO 1998-US13496W 19980629

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 44 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN AN 1999:9833 CAPLUS

```
130:66494
ΤI
     Preparation of novel quanidine mimics as factor Xa inhibitors
     Lam, Patrick Y.; Clark, Charles G.; Dominguez, Celia; Fevig, John Matthew;
IN
     Han, Qi; Li, Renhua; Pinto, Donald Joseph-Phillip; Pruitt, James Russell;
     Quan, Mimi Lifen
     The Du Pont Merck Pharmaceutical Company, USA
PA
SO
     PCT Int. Appl., 268 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                      KIND
                             DATE
                                            APPLICATION NO.
     PATENT NO.
                                             ______
PΙ
     WO 9857951
                      A1
                             19981223
                                           WO 1998-US12680 19980618
         W: AU, BR, CA, CN, CZ, EE, HU, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, UA, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                                            US 1997-878884 A 19970619
     ZA 9805247
                       Α
                             19991217
                                             ZA 1998-5247
                                                              19980617
                                            US 1997-878884 A 19970619
                                            AU 1998-79768
                                                              19980618
     AU 9879768
                             19990104
                       Α1
     AU 756755
                       B2
                             20030123
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
     EP 991638
                             20000412
                                            EP 1998-930361 19980618
                       Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
             SI, LT, LV, FI, RO
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
                                             BR 1998-10137
                                                             19980618
     BR 9810137
                       Α
                             20000808
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
                                            EE 1999-583
     EE 9900583
                       Α
                             20000815
                                                              19980618
     EE 4153
                        B1
                             20031015
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
     JP 2002505686
                             20020219
                                             JP 1999-504785
                                                             19980618
                       T2
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
     NZ 502370
                       Α
                             20021025
                                            NZ 1998-502370
                                                              19980618
                                             US 1997-878884 A 19970619
                                             WO 1998-US12680W 19980618
                                            NO 1999-5965
     NO 9905965
                       Α
                             19991203
                                                              19991203
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
                             20000531
                                            MX 1999-11908
                                                              19991216
     MX 9911908
                       Α
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
                                            LV 1999-178
     LV 12496
                             20010120
                                                              19991216
                        В
                                             US 1997-878884 A 19970619
     LT 4705
                       В
                             20000925
                                            LT 1999-147
                                                              19991217
                                            US 1997-878884 A 19970619
OS
     MARPAT 130:66494
GΙ
```

AB The title compds. [I; rings D-E represent guanidine mimics; ring D = 0CH2N:CH, CH2CH2N:CH, a 5-6 membered arom. system contg. 0-2 heteroatoms selected form the group N, O, and S; ring D is substituted with 0-2 R (substituents), provided that when ring D is unsubstituted, it contains at least one heteroatom; ring E contains 0-2 N atom and is substituted by 0-1 $\,$ R; R = halo, OH, C1-3 alkoxy, etc.; M = (un)substituted pyrazole, imidazole, tetrazole, etc.], inhibitors of factor Xa which are useful in treating and preventing a thromboembolic disorder, were prepd. and formulated. Thus, a multi-step synthesis of the title compd. II, starting with 7-aminoisoquinoline, was described. A no. of compds. I were found to exhibit a Ki of .ltoreq. 15 .mu.M against factor Xa.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 45 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1999:9820 CAPLUS
- DN 130:81510
- TIPreparation of phenylpyrazolecarboxamides as coagulation factor Xa inhibitors
- Galemmo, Robert Anthony, Jr.; Dominguez, Celia; Fevig, John Matthew; Han, INQi; Lam, Patrick Yuk-sun; Pinto, Donald Joseph Philip; Pruitt, James Russell; Quan, Mimi Lifen
- The Du Pont Merck Pharmaceutical Company, USA PA
- SO PCT Int. Appl., 259 pp. CODEN: PIXXD2
- DTPatent
- LΑ English

| FAN. | FAN.CNT 1 | | | | | | | | | | | | | | | | | |
|------|------------------------|------|-----|----|----------------------------|-----|------|------|-----|------------------|------|------|-------|------|-------|------|-----|-----|
| | PA? | CENT | NO. | | KI | ND | DATE | | | A | bbri | CATI | ON NO | ο. | DATE | | | |
| PI | WO 9857937
W: AU, B | | | | A2 19981223
A3 19990318 | | | | W | o 19 | 98-บ | S126 | 81 | 1998 | 0618 | | | |
| | | W: | | | | | | | | | | - | | | - | - | | PL, |
| | | | - | | | | UA, | - | | - | - | • | • | | • | • | | |
| | | RW: | | | CH, | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, |
| | | | PT, | SE | | | | | | | | | | | | | | |
| | | | | | | | | | | U: | 5 19 | 97-5 | 02191 | PΡ | 1997 | 0619 | | |
| | | | | | | | | | | U: | 5 19 | 97-8 | 7888 | 5 A | 1997 | 0619 | | |
| | | | | | | | | | | U: | 3 19 | 98-7 | 6691 | РР | 1998 | 0227 | | |
| | ZΑ | 9805 | 251 | | Α | | 1999 | 1217 | | \mathbf{Z}_{i} | A 19 | 98-5 | 251 | | 1998 | 3617 | | |
| | | | | | | | | | | U: | 3 19 | 97-8 | 7888 | 5 A | 1997 | 0619 | | |
| | ΑU | 9881 | 503 | | A. | 1 | 1999 | 0104 | | A | J 19 | 98-8 | 1503 | | 1998 | 0618 | | |
| | | | | | | | | | | U: | s 19 | 97-8 | 7888 | 5 A | 19970 | 0619 | | |

Patel

<12/10/2003>

| | | | | | | 1998-76691P
1998-US12681 | | | |
|---------|----------------|--------|----------|-------|-------|-----------------------------|------------|------|----|
| ITC | 5998424 | 7\ | 10001207 | | | 1998-99752 | - | | |
| U.S | 3990424 | А | 19991201 | | | 1997-50219P | | | |
| | | | | | | 1997 302131
1998-76691P | | | |
| БD | 991625 | λ2 | 20000412 | | | 1998-931355 | | | |
| EF | | | | | | GR, IT, LI, L | | ייים | TE |
| | SI, LT, | | | E IV, | GD, 6 | SK, II, DI, D | O, NE, SE, | E I | TE |
| | эт, пт, | по, гт | , 10 | | ĦΩ | 1997-878885 | n 10070610 | | |
| | | | | | | 1998-76691P | | | |
| | | | | | | 1998-US12681 | | | |
| ממ | 9810151 | Α | 20000808 | | | 1998-10151 | | | |
| Яđ | 9010131 | A | 20000000 | | | 1997-878885 | | | |
| | | | | | | 1997-676691P | | | |
| | | | | | | 1998-VS12681 | | | |
| T71 T71 | 0000504 | A | 20000815 | | | 1999-584 | | | |
| EE | 9900584 | A | 20000013 | | | 1997-878885 | | | |
| | | | | | | 1997-076691P | | | |
| | | | | | | 1998-VS12681 | | | |
| | 20200 | ~ | 20001031 | | | 1998-0512661 | | | |
| 21 | 20208 | C | 20001031 | | | 1997-878885 | | | |
| | | | | | | 1997-676691P | | | |
| | | | | | | 1998-76691P
1998-US12681 | | | |
| 7.5 | 0000507060 | m2 | 20020312 | | | 1999-504786 | | | |
| 95 | 2002507968 | Т2 | 20020312 | | | 1997-878885 | | | |
| | | | | | | 1997-878883
1998-76691P | | | |
| | | | | | | 1998-US12681 | | | |
| 110 | 6402620 | D.1 | 20020611 | | | 1999-393782 | | | |
| 05 | 6403620 | В1 | 20020611 | | | 1998-99752 | | | |
| T 3 2 | 10516 | п | 20010320 | | | 1990-99732 | | | |
| тΛ | 12516 | В | 20010320 | | | 1997-878885 | | | |
| | | | | | | 1997-676691P | | | |
| MO | 9906316 | 75. | 19991217 | | | | 19991217 | | |
| NO | 9900310 | A | 19991217 | | | 1997-878885 | | | |
| | | | | | | 1997-076691P | | | |
| | | | | | | 1998-US12681 | | | |
| T m | 4702 | ъ | 20000925 | | | 1999-146 | 19991217 | | |
| T.T. | 4702 | ь | 20000923 | | | 1997-878885 | | | |
| IIC | 2003092740 | A1 | 20030515 | | | 2002-150698 | | | |
| | 6602895 | B2 | 20030313 | | US | 2002-130090 | 20020310 | | |
| US | 0002093 | DZ | 20030603 | | 710 | 1997-50219P | D 10070610 | | |
| | | | | | | 1997-30219F
1998-76691P | | | |
| | | | | | | 1998-99752 | | | |
| | | | | | | 1999-393782 | | | |
| MΔ | RPAT 130:81510 |) | | | US | 1000 000102 | | | |

OS GI MARPAT 130:81510

<12/10/2003> Patel

```
AB EZ1M [I; E = halo, OH, alkyl, aloxy, etc.; M = Z2ZAB; A = (un)substituted carbocyclylene, -heterocyclylene; B = H, Y, XY; X = alkylene, CO, O, (un)substituted NH, etc.; Y = amino(alkyl), substituted carbocyclyl, -heterocyclyl, etc.; Z = bond, (heteroatom- or functional group-interrupted) alkylene, etc.; Z1 = (un)substituted Ph, Z2 = N-contg. heteroarylene, etc.] were prepd. Thus, MeCOCH2C(:NOMe)CO2Et was cyclocondensed with PhNHNH2 and the product amidated by 4-(H2N)C6H4C6H4(SO2NHCMe3)-2 to give, after deprotection, title compd. II. Data for biol. activity of I were given.
```

```
L3 ANSWER 46 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
```

- TI Preparation of benzamide derivatives having a vasopressin antagonistic activity
- IN Setoi, Hiroyuki; Ohkawa, Takehiko; Zenkoh, Tatsuya; Sawada, Hitoshi; Sawada, Yuki; Oku, Teruo
- PA Fujisawa Pharmaceutical Co., Ltd., Japan; Setoi, Hiroyuki; Ohkawa, Takehiko; Zenkoh, Tatsuya; Sawada, Hitoshi; Sawada, Yuki; Oku, Teruo
- SO PCT Int. Appl., 332 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

```
PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
ΡI
    WO 9824771
                     A1
                           19980611
                                          WO 1997-JP4192
                                                           19971118
        W: AU, CA, CN, HU, IL, JP, KR, MX, US, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                          AU 1996-3953
                                                         A 19961202
    AU 9749672
                           19980629
                      A1
                                          AU 1997-49672
                                                           19971118
                                          AU 1996-3953
                                                         A 19961202
                                          WO 1997-JP4192 W 19971118
    EP 946519
                      A1
                           19991006
                                          EP 1997-912493
                                                           19971118
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
                                          AU 1996-3953 A 19961202
                                          WO 1997-JP4192 W 19971118
    JP 2001505193
                      Т2
                           20010417
                                          JP 1998-521225
                                                           19971118
                                          AU 1996-3953 A 19961202
                                          WO 1997-JP4192 W 19971118
    US 6207693
                      В1
                           20010327
                                          US 1999-308662
                                                           19990602
                                          AU 1996-3953 A 19961202
                                          WO 1997-JP4192 W 19971118
    US 6316482
                      В1
                           20011113
                                          US 2000-614132
                                                           20000711
                                          AU 1996-3953
                                                        A 19961202
                                          US 1999-308662 A319990602
```

OS MARPAT 129:67773

GI

AN 1998:394328 CAPLUS

DN 129:67773

$$R^{1}$$
 N
 R^{2}
 $A-E-Y$
 R^{3}
 X

AB The title compds. [I; Rl = (un)substituted aryl, cyclo(lower)alkyl, heterocyclyl; R2 = H, lower alkyl, etc.; R3 = H, halo, OH, etc.; A = a single bond, O, NH; E = lower alkylene, lower alkenylene, etc.; X = CH:CH, CH:N, S; Y = (un)substituted aryl, condensed heterocyclyl, etc.] and their pharmaceutically acceptable salts, useful in treatment and/or prevention of hypertension, heart failure, renal insufficiency, edema, ascites, vasopressin parasecretion syndrome, hepatocirrhosis, hyponatremia, hypokalemia, diabetic, circulation disorder, cerebrovascular disease, Meniere's disease or motion sickness, were prepd. Thus, the title compd. II showed IC50 of 1.5 nM against vasopressin 1 receptor binding.

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 47 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:42277 CAPLUS

DN 128:110886

TI Phenylurea IL-8 receptor antagonists, preparation thereof, and therapeutic

IN Widdowson, Katherine L.

PA Smithkline Beecham Corp., USA; Widdowson, Katherine L.

SO PCT Int. Appl., 42 pp. CODEN: PIXXD2

DT Patent

LA English

FAN CNT 1

| LWM · CMI I | | | | |
|------------------------|------|----------|-----------------|----------|
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| | | | | |
| PI WO 9749399 W: JP US | A1 | 19971231 | WO 1997-US10904 | 19970624 |

Patel

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

US 1996-22000P P 19960627 EP 1997-930205 19970624

EP 907362 A1 19990414 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

US 1996-22000P P 19960627

WO 1997-US10904W 19970624

JP 2000513359 T2 20001010 JP 1998-503449 19970624

US 1996-22000P P 19960627

WO 1997-US10904W 19970624

MARPAT 128:110886

Phenylurea derivs. (Markush included) are provided for the treatment of AΒ disease states mediated by the chemokine, Interleukin-8 (IL-8). Prepn. of e.g. N-(2-hydroxy-4-nitrophenyl)-N'-(2-pyridyl)urea is described. Diseases treatable by the compds. of the invention include e.g. psoriasis, asthma, chronic obstructive pulmonary disease, stroke, and Alzheimer's disease.

ANSWER 48 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN L3

ΑN 1998:1292 CAPLUS

DN 128:71993

TIPreparation of herbicidal pyrazole derivatives

Mathews, Christopher John; Baker, Don Robert IN

Zeneca Ltd., UK PA

U.S., 21 pp. SO

CODEN: USXXAM

DTPatent

LΑ English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| | | | | | |
| PI | US 5698495 | Α | 19971216 | US 1996-742010 | 19961031 |
| | US 5786302 | Α | 19980728 | US 1997-905749 | 19970804 |
| | | | | US 1996-742010 | 19961031 |

MARPAT 128:71993 OS

GI

ΑB The pyrazole derivs. I [R1 = (un)] substituted alkyl or haloalkyl; R2 = R1, (un) substituted cycloalkyl; R3 = H, halo, alkyl or haloalkyl; R4 = (un) substituted alkyl, haloalkyl, alkoxy, etc.; R5 = H, (un) substituted alkyl or alkoxyalkyl; R6-9 = H, halo, (un) substituted alkyl, alkenyl, alkynyl, etc.; A = 0, S, SO or SO2; Z = S or bond] are prepd. as herbicides.

Patel

```
ANSWER 49 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
T.3
     1997:684401 CAPLUS
ΑN
DN
     127:346304
TI
     Preparation of pyridinioarylcarbamoylindoline derivatives as serotonin
     receptor antagonists.
IN
     Bromidge, Steven Mark
     Smithkline Beecham Plc, UK; Bromidge, Steven Mark
PA
SO
     PCT Int. Appl., 21 pp.
     CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 1
    PATENT NO. KIND DATE APPLICATION NO. DATE
                    A1 19971016 WO 1997-EP1611 19970326
    WO 9737989
PΙ
        W: JP, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                        GB 1996-7219 A 19960404
                    A1 19990120
     EP 891348
                                         EP 1997-915465 19970326
        R: BE, CH, DE, ES, FR, GB, IT, LI, NL
                                         GB 1996-7219 A 19960404
                                         WO 1997-EP1611 W 19970326
                                         JP 1997-535805 19970326
     JP 2001508399 T2 20010626
                                         WO 1997-EP1611 W 19970326
    US 6028085 A
                          20000222
                                         US 1998-155589 19980930
                                         GB 1996-7219 A 19960404
                                         WO 1997-EP1611 W 19970326
OS
    MARPAT 127:346304
    (R1) nP1A[P2(R2)m]NR3COR4[R1, R2 = H, (substituted) alkyl; R3 = H, alkyl;
AB
     R4 = (substituted) N-bonded bicycloheterocyclyl, aminopyrazinyl,
     aminopyridinyl, aminophenyl, etc.; P1, P2 = Ph, heterocyclyl contg. a
     quaternary N atom; A = bond, chain of 1-5 atoms (substituted) phenylene,
     heterocyclylene; n, m = 0-2, were prepd. as 5-HT2B/5-HT2C antagonists
     with increased soly./activity (no data). Thus, 5-methoxy-6-
     trifluoromethyl-1-[3-fluoro-5-(pyridin-3-yl)phenylcarbamoyl]indoline in
     MeCN was treated with sodium tetraphenylboron and bromomethyl acetate
     followed by 4 h reflux to give a tetraphenylborate salt which was
     subjected to ion exchange to give 100% 5-methoxy-6-trifluoromethyl-1-[3-
     fluoro-5-[1-(acetyloxy)methylpyridinium-3-yl]phenylcarbamoyl]indoline
     chloride.
    ANSWER 50 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
L3
    1997:618728 CAPLUS
AN
DN
     127:278147
TI
    Preparation of pyridylurea derivatives as antitumor and antiviral agents
     Shudo, Koichi; Fukutomi, Ryuta
IN
PΑ
     Shudo Koichi, Japan; Nisshin Flour Milling Co., Ltd.
     Jpn. Kokai Tokkyo Koho, 13 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
                                       APPLICATION NO. DATE
    PATENT NO.
                   KIND DATE
```

JP 1996-46086 19960304 JP 1996-46086 19960304

Patel <12/10/2003>

JP 09241243 A2 19970916

PΙ

OS CASREACT 127:278147; MARPAT 127:278147

$$(R^3 \text{ or } R^4)NH$$
 N III

The title derivs. I [R1 = C6H4C(:NH)NH2-4, C6H4R7-4, Q; R2 = NR1R6, CH2R7;AΒ R7 = N(R8)2, N+R83; R3-R6, R8 = H, C1-6 alkyl] and their pharmaceutically acceptable salts, useful as antitumor and antiviral agents, are prepd. by treatment of R9R3NCOCl (R9 = C6H4CN-4, C6H4Y-4; Y = protected amino) or PhOCONR3R9 with diaminopyridines II followed by conversion of cyano group to guanyl group when R9 = C6H4CN-4 or deprotection of amino group and N-alkylation when R9 = C6H4Y-4. I are also prepd. by condensation of R9NHR3 with diaminopyridines III (R10 = protected aminomethyl) through CO group in the presence of carbonyldiimidazole or by autocondensation of III through CO group in the presence of carbonyldiimidazole followed by conversion of cyano group to quanyl group when R9 = C6H4CN-4 or deprotection of amino group and N-alkylation when R9 = C6H4Y-4 and removal of protective group of R10. N,N'-dimethyl-2,6-diaminopyridine (prepn. given) was treated with 4-(N-phenoxycarbonyl)aminobenzonitrile (prepn. given) in DMSO at 100-110.degree. for 36 h to give N,N'-dimethyl-N,N'bis[(N-4-cyanophenyl)aminocarbonyl]-2,6-diaminopyridine, which in MeOH was bubbled with HCl at 0.degree. and the resulting product in MeOH was bubbled with NH3 at 0.degree. to give N, N'-dimethyl-N, N'-bis[(N-4amidinophenyl)aminocarbonyl]-2,6-diaminopyridine hydrochloride (IV). showed 57% binding rate for DNA derived from calf thymus, which was comparable to or greater than that of netropsin.

- L3 ANSWER 51 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1997:394295 CAPLUS
- DN 127:5010
- TI 3-Spiroindolin-2-one derivatives as vasopressin and/or oxytocin receptor ligands
- IN Foulon, Loic; Garcia, Georges; Serradeil-Le Gal, Claudine; Valette, Gerard
- PA Sanofi, Fr.; Foulon, Loic; Garcia, Georges; Serradeil-Le Gal, Claudine;

```
Valette, Gerard
    PCT Int. Appl., 72 pp.
    CODEN: PIXXD2
DT
    Patent
LΑ
    French
FAN.CNT 1
    PATENT NO. KIND DATE
                                APPLICATION NO. DATE
    WO 9715556 A1 19970501 WO 1996-FR1666 19961024
                   ____
PT
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
           DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
           AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
            IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG
                                       FR 1995-12533 A 19951024
    FR 2740136
                   A1 19970425
                                      FR 1995-12533 19951024
    FR 2740136
                   B1 19980109
    TW 474917
                   В
                         20020201
                                       TW 1996-85112955 19961022
                                       FR 1995-12533 A 19951024
                   A 20001230
    IN 185328
                                       IN 1996-DE2288 19961023
                                       FR 1995-12533 A 19951024
    CA 2235686
                   AA 19970501
                                       CA 1996-2235686 19961024
                                       FR 1995-12533 A 19951024
    AU 9673080
                   A1 19970515
                                       AU 1996-73080
                                                      19961024
                   B2 20000210
    AU 715841
                                       FR 1995-12533 A 19951024
                                       WO 1996-FR1666 W 19961024
                  A 19970529
    ZA 9608945
                                       ZA 1996-8945 19961024
                                       FR 1995-12533 A 19951024
    EP 873309 A1 19981028
EP 873309 B1 20021218
                                       EP 1996-934967 19961024
       R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI
                                       FR 1995-12533 A 19951024
                                       WO 1996-FR1666 W 19961024
    CN 1202886
                    Α
                         19981223
                                       CN 1996-198579 19961024
    CN 1106384
                    В
                         20030423
                                       FR 1995-12533 A 19951024
    BR 9611198
                   A 19990406
                                       BR 1996~11198
                                                     19961024
                                       FR 1995-12533 A 19951024
                                       WO 1996-FR1666 W 19961024
    JP 11509232
                   T2 19990817
                                       JP 1996-516363 19961024
                                       FR 1995-12533 A 19951024
                                       WO 1996-FR1666 W 19961024
    NZ 320352
                Α
                         20000128
                                       NZ 1996-320352 19961024
                                       FR 1995-12533 A 19951024
                                       WO 1996-FR1666 W 19961024
    RU 2167864
                                       RU 1998-109945 19961024
               C2 20010527
                                       FR 1995-12533 A 19951024
                                       WO 1996-FR1666 W 19961024
    JP 2001302631 A2
                         20011031
                                       JP 2001-75467 19961024
                                       FR 1995-12533 A 19951024
                                       JP 1997~516363 A319961024
    JP 3274471 B2 20020415
                                       JP 1997-516363 19961024
                                       FR 1995-12533 A 19951024
```

| 099510 | 06.3 | | Page 72 | | | | |
|--------|----------------|----|----------|----------------|--|--------|----------------------------------|
| I | L 124002 | A1 | 20021110 | _ | 1996-124002
1995-12533 | A | 19961024
19951024 |
| A! | Г 229940 | E | 20030115 | WO
AT
FR | 1996-FR1666
1996-934967
1995-12533 | W | 19961024
19961024
19951024 |
| E: | 3 2191769 | Т3 | 20030916 | WO
ES | 1996-FR1666
1996-934967 | W | 19961024
19961024 |
| U | 5 5994350 | A | 19991130 | FR
US | 1995-12533
1998-51900 | | 19951024
19980417 |
| NO | 9801817 | A | 19980423 | FR
WO
NO | 1995-12533
1996-FR1666
1998-1817 | W | 19951024
19961024
19980423 |
| | | | | FR
WO | 1995-12533
1996-FR1666 | A
W | 19951024
19961024 |
| H | K 1016596 | A1 | 20030404 | HK
FR | 1999-101588
1995-12533 | | 19990414
19951024 |
| បន | 5 6046341 | Α | 20000404 | WO
US
FR | 1996-FR1666
1999-417190
1995-12533 | W | 19961024
19991012
19951024 |
| OS MA | ARPAT 127:5010 | | | 110 | 1000 12000 | 1 | 10001024 |

os

GI

$$R^1$$
 $Cy-OTZ$
 SO_2
 OMe
 R^2
 W
 R^3
 I
 OMe
 OMe

Indolin-2-one derivs. I [W = CH2 or SO2; Cy = atoms to form spirocyclic AB (un)satd. non-arom. C3-12 hydrocarbon ring optionally fused or substituted by .gtoreq. 1 C1-7 alkyl or by C3-6 spirocycloalkyl; T = C1-4 alkylene optionally interrupted by C3-6 cycloalkylene, said alkylenes optionally substituted by C1-3 alkyl, or T = direct bond; Z = particularly amino;R1-R4 = H or substituents, e.g. halo, alkyl, etc.] and their salts are claimed. The compds. may be used in drugs having vasopressin and/or oxytocin receptor affinity. For example, 5-ethoxy-3-spiro[4-(2chloroethoxy)cyclohexane]indolin-2-one (mixed isomers, prepn. given) was treated with KOBu-tert and 4-(N-tert-butylcarbamoyl)-2-methoxybenzenesulfonyl chloride to give the corresponding 1-sulfonylated deriv., which then reacted with morpholine and NaI in DMF at 60.degree. to give 2 isomers of title compd. II. I had IC50 values of 10-5 to 10-9 M for inhibition of binding of tritiated arginine-vasopressin to rat mammary vasopressin receptors in vitro. Diuretic effects of I in rats showed them to be strong V2 antagonists.

- L3 ANSWER 52 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1997:287158 CAPLUS
- DN 126:349686
- TI Color photographic element containing yellow colored magenta masking coupler
- IN Kapp, Daniel L.; Younathan, Janet N.; Ross, Robert J.; Merrill, James P.
- PA Eastman Kodak Company, USA
- SO U.S., 23 pp. CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|----------------------------------|----------|
| | | | | | |
| ΡI | US 5622818 | A | 19970422 | US 1995-564515
US 1995-564515 | 19951129 |

- OS MARPAT 126:349686
- AB A multilayer silver halide color photog. element comprising a support bearing a light-sensitive silver halide emulsion layer and a non-diffusible yellow-colored magenta masking coupler wherein the masking coupler is a 2'-hydroxy-5'-substituted-4-phenylazo-5-pyrazolone. The masking coupler has good coupling activity and desirable hues and can be obtained in good yields by simple syntheses.
- L3 ANSWER 53 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1996:596172 CAPLUS
- DN 125:247613
- TI Preparation of indolines as 5-HT2B/2C receptor antagonists
- IN Gaster, Laramie Mary; Wyman, Paul Adrian; Mulholland, Keith Raymond; Davies, David Thomas; Duckworth, David Malcom; Forbes, Ian Thomson; Jones, Graham Elgin
- PA Smithkline Beecham Plc, UK
- SO PCT Int. Appl., 79 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

| | PATENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON N | 0. | DATE | | | | |
|----|---------|------|-------|-----|---------|------|------|-------|-----|-------|-------|------|-----|-------|--------|------|-----------|----|
| | | | | | | | ~ | | _ | | | | | | | | | |
| ΡI | WO 9623 | 3783 | | Α | 1 | 1996 | 8080 | | W | 0 19 | 96-E | P368 | | 1996 | 0126 | | | |
| | W: | AL, | ΑM, | ΑT, | ΑU, | ΑZ, | BB, | BG, | BR, | BY, | CA, | CH. | CN. | CZ, | DE. | DK. | EE. | |
| | | ES, | FI, | GB. | GE. | HU. | IS. | JP. | KE. | KG. | КÞ. | KD, | K7 | LK, | T D | TC | ,
T.TP | |
| | | ′ | | , | , | , | , | J _ , | ,,, | 110, | 111 | 1/1/ | 174 | шк, | אטור י | TIO, | шт, | |
| | | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NZ, | PL, | PT. | RO, | RU. | SD. | SE. | |
| | | SG, | SI | | | | | | · | • | • | -, | • | | , | , | , | |
| | RW: | KE, | LS, | MW, | SD, | SZ, | UG, | AT, | BE, | CH, | DE, | DK. | ES. | FR. | GB. | GR. | IE. | |
| | | TΨ | TII | MC | ATT | D.M. | C E | DE. | D 7 | ~~` | ~~′ | ~- | | | , | , | | |
| | | T . | TiO * | MC, | ירד ועד | PT, | SĿ, | Br, | вυ, | CF, | CG, | CI, | CM, | GA, | GN, | ML, | MR, | NE |
| | | | | | | | | | CI | R 10 | 25-2 | 052 | 7\ | 1995 | 2202 | • | • | |
| | | | | | | | | | Gı | U 19. | JJ-Z | 002 | A | エラタン | JZ UZ | | | |
| | | | | | | | | | G1 | B 199 | 95~83 | 327 | Α | 19950 | 1425 | | | |

| CA 2212061 | AA 19960808 | GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 CA 1996-2212061 19960126 GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 |
|-------------------------|----------------------------|--|
| AU 9646646
AU 699727 | A1 19960821
B2 19981210 | AU 1996-46646 19960126 GB 1995-2052 A 19950202 |
| BR 9607016 | A 19971028 | GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 BR 1996-7016 19960126 GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 |
| EP 808312
EP 808312 | A1 19971126
B1 20001102 | GB 1995-8967 A 19950503
GB 1995-16845 A 19950817
GB 1995-17542 A 19950826
GB 1995-18574 A 19950912
WO 1996-EP368 W 19960126
EP 1996-902259 19960126 |
| R: AT, BE
IE, SI | | FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 |
| CN 1179156 | A 19980415 | CN 1996-192777 19960126
GB 1995-2052 A 19950202 |
| JP 10513442 | T2 19981222 | JP 1996-523247 19960126 |
| | | GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 |

| 09951006.3 | | Page 75 | |
|-------------|-----------|----------|---|
| AT 197300 | E | 20001115 | AT 1996-902259 19960126 |
| | | | GB 1995-2052 A 19950202 |
| | | | GB 1995-8327 A 19950425
GB 1995-8967 A 19950503 |
| | | | GB 1995-16845 A 19950817 |
| | | | GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912 |
| 77. 0151650 | 2 | 00010101 | WO 1996-EP368 W 19960126 |
| ES 2151652 | тЗ | 20010101 | ES 1996-902259 19960126
GB 1995-2052 A 19950202 |
| | | | GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503 |
| | | | GB 1995-16845 A 19950817 |
| PT 808312 | Т | 20010330 | GB 1995-18574 A 19950912
PT 1996-96902259 19960126 |
| F1 000312 | 1 | 20010330 | GB 1995-2052 A 19950202 |
| | | | GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503 |
| | | | GB 1995-16845 A 19950817
GB 1995-17542 A 19950826 |
| | | | GB 1995-17542 A 19950826
GB 1995-18574 A 19950912 |
| PL 184490 | B1 | 20021129 | PL 1996-321706 19960126 |
| | | | GB 1995-2052 A 19950202 |
| | | | GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503
GB 1995-16845 A 19950817 |
| | | | GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912 |
| 0600750 | | 10070000 | WO 1996-EP368 W 19960126 |
| ZA 9600758 | A1 | 19970930 | ZA 1996-758 19960131
GB 1995-2052 A 19950202 |
| IL 116998 | A1 | 20010808 | IL 1996-116998 19960201 |
| | | | GB 1995-2052 A 19950202 |
| | | | GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503
GB 1995-16845 A 19950817 |
| | | | GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912 |
| FI 9703205 | A | 19971001 | FI 1997-3205 19970801 |
| | | | GB 1995-2052 A 19950202
GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503 |
| | | | GB 1995-16845 A 19950817 |
| | | | GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912
WO 1996-EP368 W 19960126 |
| NO 9703543 | Α | 19971001 | NO 1997-3543 19970801 |
| | | | GB 1995-2052 A 19950202 |
| | | | GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503
GB 1995-16845 A 19950817 |
| | | | GB 1995-16645 A 19950617
GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912 |
| | | | WO 1996-EP368 W 19960126 |
| US 5990133 | Α | 19991123 | US 1997-875506 19971016 |
| | | | GB 1995-2052 A 19950202
GB 1995-8327 A 19950425 |
| | | | 3D 1993 0027 R 19930423 |

| нк 1 | 003883 | A1 | 20010831 | GB
GB
WO
HK
GB
GB | 1995-8967
1995-16845
1995-17542
1995-18574
1996-EP368
1998-103018
1995-2052
1995-8327
1995-8967 | A
A
W
A
A | 19950503
19950817
19950826
19950912
19960126
19980409
19950202
19950425
19950503 |
|------|---------------------|----------|----------------------|----------------------------------|---|----------------------------------|--|
| | | | | WO | 1995-17542
1995-18574
1996-EP368 | A
A | 19950817
19950826
19950912
19960126 |
| US 6 | 235758 | B1 | 20010522 | GB
GB
GB
GB
GB | 1999-359606
1995-2052
1995-8327
1995-8967
1995-16845
1995-17542
1995-18574
1996-EP368 | A
A
A
A | 19990723
19950202
19950425
19950503
19950817
19950826
19950912
19960126 |
| | 003105139
638953 | A1
B2 | 20030605
20031028 | US GB GB GB GB GB US | 2001-767245
1995-2052
1995-8327
1995-8967
1995-16845
1995-17542
1995-18574
1996-EP368 | A
A
A
A
A
W
A3 | 319971016
20010122
19950202
19950425
19950503
19950817
19950826
19950912
19960126
319971016 |

OS CASREACT 125:247613; MARPAT 125:247613

GI

$$[R1]_{\overline{n}} P^{1} - A - P^{2} \begin{bmatrix} R^{2} \\ R \end{bmatrix}_{\overline{m}} I$$

$$NH \longrightarrow N$$

$$OMe$$

$$NH \longrightarrow N$$

$$NH$$

AB The title compds. [I; P1, P2 = Ph, arom. or partially satd. monocyclic or bicyclic heterocyclic ring; A = bond, (substituted) C1-5 alkylene, etc.; R1, R2 = H, (substituted) C1-6 alkyl, C2-6 alkenyl, etc.; R3 = H, C1-6 alkyl; R4 = 1-indolinyl, etc.; n, m = 0-2], useful in the treatment of CNS disorders such as anxiety, were prepd. Thus, treatment of 3-(3-pyridyl)aniline with 1,1-dicarbonyldiimidazole in CH2C12 followed by

Patel

reaction of the intermediate with 5-methoxy-6-trifluoromethylindoline in DMF afforded 85% the indoline II which showed pKi of 5.8-9.7 against [3H]-mesulergine binding to rat or human 5-HT2C clones expressed in 293 cells in vitro.

```
L3
     ANSWER 54 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     1996:467112 CAPLUS
DN
     125:114503
TI
     Substituted 2-acylamino-pyridines as inhibitors of nitric oxide synthase
     Guthikonda, Ravindra K.; Hagmann, William K.; Maccoss, Malcolm; Shah,
IN
     Shrenik K.; Durette, Philippe L.
PA
     Merck and Co., Inc., USA
     PCT Int. Appl., 79 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                        APPLICATION NO. DATE
                     ____
                           ----
                                         ______
     WO 9618617 A1 19960620 WO 1995-US16158 19951208
PI
         W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP,
             KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
             IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
            NE, SN, TD, TG
                                          US 1994-353859
                                                           19941212
     AU 9645158
                      A1
                           19960703
                                          AU 1996-45158
                                                           19951208
                                          US 1994-353859
                                                           19941212
                                          WO 1995-US16158 19951208
     US 5908842
                      Α
                           19990601
                                          US 1997-836863
                                                           19970520
                                          WO 1995-US16158 19951208
OS
    MARPAT 125:114503
     Substituted 2-acylaminopyridine compds. and pharmaceutically acceptable
AΒ
     salts were prepd. which were found useful in the treatment of nitric oxide
     synthase mediated diseases and disorders.
L3
    ANSWER 55 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
AN
    1996:446514 CAPLUS
DN
    125:114487
TΙ
    CNS-Active pyridinylurea derivatives
IN
    Forbes, Ian Thomson; Jones, Graham Elgin
PΑ
    Smithkline Beecham P.L.C., UK
    PCT Int. Appl., 24 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LΑ
    English
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
     _____ ____
                          -----
                                         ~----
PΙ
    WO 9611930
                      A1 19960425
                                        WO 1995-EP3944 19951005
        W: JP, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                         GB 1994-20999 A 19941018
    EP 788499
                      A1
                           19970813
                                         EP 1995-934135 19951005
```

Patel <12/10/2003>

R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE

GB 1994-20999 A 19941018

| | | | | WO | 1995-EP3944 | W | 19951005 |
|----|-------------------|----|----------|----|-------------|---|----------|
| | JP 10508584 | T2 | 19980825 | JΡ | 1995-512907 | | 19951005 |
| | | | | GB | 1994-20999 | Α | 19941018 |
| | | | | WO | 1995-EP3944 | W | 19951005 |
| | US 5866586 | A | 19990202 | US | 1997-817580 | | 19970417 |
| | | | | GB | 1994-20999 | Α | 19941018 |
| | | | | WO | 1995-EP3944 | W | 19951005 |
| os | MARPAT 125:114487 | | | | | | |
| GΙ | | | | | | | |

$$Q^{1} = R^{6} \xrightarrow{R^{7} R^{7}} R^{6}$$

$$Y \xrightarrow{R^{4}} Q^{2} = \xrightarrow{R^{8}} X \xrightarrow{R^{4}} R^{4}$$

$$Y \xrightarrow{R^{5}} R^{5}$$

$$Y \xrightarrow{R^{5}} R^{6}$$

The invention relates to heterocyclic compds. R1-G-N(R2)-CO-R3 [I; G=PhAΒ ring, quinoline or isoquinoline nucleus, or a 5- or 6-membered arom. heterocycle contg. 1-3 heteroatoms (N, O, and/or S); R1 = H, alkyl, alkylthio, cyano, NO2, halo, CF3, amino, etc.; R2 = H, alkyl; R3 = group Q1 or Q2; X = Y = N, or one of X and Y = N and the other = C or CH; R4, R5 = alkyl, alkoxy, OH, halo, NO2, (un) substituted Ph, etc.; or R4R5 forms (un) substituted 5-membered carbo- or heterocyclic ring; R6, R7, R8 = H, alkyl]. Compds. I are 5-HT2C receptor antagonists, and some or all of them are also 5-HT2B antagonists. They are useful in the treatment of a variety of CNS and GI disorders. For example, 5,6-dichloronicotinic acid underwent sulfurization in the 6-position by thiourea (87%) and S,O-dimethylation with MeI (50%) to give Me 3-chloro-2-(methylthio)pyridine-5-carboxylate. This was converted to the corresponding hydrazide (32%) and then the carbonyl azide (72%). The latter was decompd. in refluxing PhMe, and the intermediate isocyanate treated with 3-aminopyridine, to give 85% title compd. II. The three example compds. had pKi of 7.4-8.1 in a test for displacement of [3H]-mesulergine from rat or human 5-HT2C clones, expressed in 293 cells in vitro.

- L3 ANSWER 56 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1996:380210 CAPLUS
- DN 125:114681
- TI Pyrimidine derivatives and processes for the preparation thereof
- IN Zimmermann, Juerg
- PA Ciba-Geigy Corporation, USA

| SO
DT
LA | U.S., 18 p
CODEN: USX
Patent
English
CNT 3 | | n-part of N | U.S. | Ser. No. 42,322, abandoned. |
|----------------|--|-------------------|----------------------|------|---|
| E PAIN . | PATENT NO. | KIND | DATE | | APPLICATION NO. DATE |
| PI | US 5521184 | A | 19960528 | | US 1994-234889 19940428
CH 1992-1083 A 19920403
US 1993-42322 B219930402
CH 1993-2966 A 19931001
CA 1994-2148477 19940921 |
| PATE | уг гамті.У т | NFORMATION: | | | CH 1993-2966 A 19931001 |
| FAN | 1994:10705 | | | | APPLICATION NO. DATE |
| ΡI | EP 564409 | A1 | 19931006 | | EP 1993-810219 19930325 |
| | | B1
, BE, CH, D | | | GB, GR, IE, IT, LI, LU, NL, PT, SE |
| | AT 188964 | E | 20000215 | | CH 1992-1083 A 19920403
AT 1993-810219 19930325 |
| | ES 2142857 | Т3 | 20000501 | | CH 1992-1083 A 19920403
ES 1993-810219 19930325
CH 1992-1083 A 19920403 |
| | CA 2093203 | AA | 19931004 | | CA 1993-2093203 19930401 |
| | CA 2093203 | | | | CH 1992-1083 A 19920403 |
| | CZ 283944 | В6 | 19980715 | | CZ 1993-560 19930401
CH 1992-1083 A 19920403 |
| | RU 2125992 | C1 | 19990210 | | |
| | IL 105264 | A1 | 19990411 | | |
| | SK 280620 | В6 | 20000516 | | |
| | NO 9301283 | A | 19931004 | | NO 1993-1283 19930402
CH 1992-1083 A 19920403 |
| | ZA 9302397 | A | 19931004 | | ZA 1993-2397 19930402 |
| | AU 9335694 | A1 | 19931007 | | CH 1992-1083 A 19920403
AU 1993-35694 19930402 |
| | AU 666709 | | 19960222 | | 110 1333 30031 13300102 |
| | | _ | 10001007 | | CH 1992-1083 A 19920403 |
| | CN 1077713
CN 1043531 | | 19931027
19990602 | | CN 1993-103566 19930402 |
| | HU 64050 | A2 | 19931129 | | CH 1992-1083 A 19920403
HU 1993-982 19930402 |
| | JP 0608783 | 4 A2 | 19940329 | | CH 1992-1083 A 19920403
JP 1993-78096 19930405 |
| | JP 2706682 | | | | СН 1992-1083 А 19920403 |
| FAN | 1995:73537
PATENT NO. | | DATE | | APPLICATION NO. DATE |
| | | | | | |
| ΡΙ | W: AM | | G, BR, BY, | CA, | WO 1994-EP3149 19940921
CN, CZ, EE, FI, GE, HU, JP, KG, KP,
MG, MN, NO, NZ, PL, RO, RU, SI, SK, |

OS GI

| | RW: | KE,
MC, | MW,
NL, | | SZ, | AT, | | | | | | | GR, | | | | |
|------|------|------------|------------|------------------|-----|------|------|-----|---------|----------|-------|-----|--------------|------|-----|-----|----|
| | | TD, | TG | | | | | CI | ים די ד | ດລ_ວ | 066 | 7\ | 1002 | 1001 | | | |
| | | | | | | | | | | | | | 1993
1994 | | | | |
| 77.0 | 5543 | r 0 0 | | _ | | 1006 | 0006 | | | | | | | | | | |
| US | 5543 | 520 | | A. | | 1990 | 0000 | | | | | | 1993 | | | | |
| | | | | | | | | _ | | _ | | _ | 1994 | | | | |
| C A | 2148 | 177 | | 70. | 7. | 1005 | 0/12 | | | | | | 1994 | | | | |
| CA | 2140 | 4// | | A | A. | T222 | 0413 | | | | | | 1993 | | | | |
| 7.11 | 9476 | 975 | | 71. | 1 | 1005 | 0501 | | | | | | 1994 | | | | |
| | 6938 | _ | | B | | 1998 | | 110 | , 15. | <i>-</i> | 0373 | | 1001 | 0521 | | | |
| AU | 0930 | 04 | | 15. | ۷. | 1990 | 0103 | CF | 1 19 | 93-2 | 966 | А | 1993 | 1001 | | | |
| | | | | | | | | | | | | _ | 1994 | | | | |
| | | | | | | | | | | | | | 1994 | | | | |
| EP | 6720 | 40 | | A | 1 | 1995 | 0920 | | | | | | | | | | |
| | | | | | | | | | | | | | LU, | | NL, | PT, | SE |
| | | • | • | • | • | · | · | | | | | | 1993 | | | | |
| | | | | | | | | CF | I 199 | 94-2 | 278 | Α | 1994 | 0718 | | | |
| | | | | | | | | WC | 19 | 94-E | P3149 | 9 W | 1994 | 0921 | | | |
| JP | 0850 | 4834 | | \mathbf{T}^{2} | 2 | 1996 | 0528 | JI | 9 19 | 94-5 | 1057 | б | 1994 | 0921 | | | |
| | | | | | | | | CI | I 19 | 93-2 | 966 | Α | 1993 | 1001 | | | |
| | | | | | | | | CŦ | I 19 | 94-2 | 278 | Α | 1994 | 0718 | | | |
| | | | | | | | | WC | 199 | 94-E | P3149 | 9 W | 1994 | 0921 | | | |
| MAI | RPAT | 125: | 1146 | 81 | | | | | | | | | | | | | |

$$R^{1}$$
 R^{2}
 N
 N
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{5}
 R^{6}

There are described N-phenyl-2-pyrimidine-amine derivs. (I) wherein R1 is 4-pyrazinyl, 1-methyl-1H-pyrrolyl, amino- or amino-lower alkyl-substituted Ph wherein the amino group in each case is free, alkylated or acylated, 1H-indolyl or 1H-imidazolyl bonded at a five-membered ring carbon atom, or unsubstituted or lower alkyl-substituted pyridyl bonded at a ring carbon atom and unsubstituted or substituted at the nitrogen atom by oxygen; R2 and R3 are hydrogen or lower alkyl; one or two of R4, R5, R6, R7 are each nitro, fluoro-substituted lower alkoxy or -N(R9)C(:X)(Y)nR10. These compds. can be used, for example, in the therapy of tumoral diseases. Three example formulations are given.

- L3 ANSWER 57 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1996:214745 CAPLUS
- DN 124:289261
- TI Preparation of 4-(2-phenylethyl)pyridine derivatives as phosphodiesterase IV inhibitors

```
Warrellow, Graham John; Boyd, Ewan Campbell; Alexander, Rikki Peter
     Celltech Therapeutics Ltd., UK
     PCT Int. Appl., 83 pp.
     CODEN: PIXXD2
DΤ
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                          APPLICATION NO.
                                                             DATE
                            ______
                                            ______
PΙ
     WO 9535283
                     A1
                                          WO 1995-GB1461
                            19951228
                                                             19950621
        W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
             MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
             TM, TT
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
             SN, TD, TG
                                            GB 1994-12384 A 19940621
                                            GB 1994-12386 A 19940621
                                           GB 1994-12493 A 19940622
                                           GB 1994-15836 A 19940805
    US 6245774
                       В1
                            20010612
                                           US 1995-492855
                                                            19950620
                                           GB 1994-12384 A 19940621
                                           GB 1994-12386 A 19940621
                                           GB 1994-12493 A 19940622
                                           GB 1994-15836 A 19940805
    CA 2192645
                       AΑ
                            19951228
                                           CA 1995-2192645 19950621
                                           GB 1994-12384 A 19940621
                                           GB 1994-12386 A 19940621
                                           GB 1994-12493 A 19940622
                                           GB 1994-15836 A 19940805
    AU 9527463
                                           AU 1995-27463
                      A1
                            19960115
                                                            19950621
    AU 707717
                      В2
                            19990715
                                           GB 1994-12384 A 19940621
                                           GB 1994-12386 A 19940621
                                           GB 1994-12493 A 19940622
                                           GB 1994-15836 A 19940805
                                           WO 1995-GB1461 W 19950621
    EP 766669
                                                           19950621
                      A1
                            19970409
                                           EP 1995-922635
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                           GB 1994-12384 A 19940621
                                           GB 1994-12386 A 19940621
                                           GB 1994-12493 A 19940622
                                           GB 1994-15836 A 19940805
                                           WO 1995-GB1461 W 19950621
    JP 10503174
                      T2
                            19980324
                                           JP 1995-501845
                                                            19950621
                                           GB 1994-12384 A 19940621
                                           GB 1994-12386 A 19940621
                                           GB 1994-12493 A 19940622
                                           GB 1994-15836 A 19940805
                                           WO 1995-GB1461 W 19950621
    US 2002143011
                      A1
                           20021003
                                           US 2001-805842
                                                            20010314
                                           GB 1994-12384 A 19940621
                                           GB 1994-12386 A 19940621
                                           GB 1994-12493 A 19940622
                                           GB 1994-15836 A 19940805
                                           US 1995-492855 A319950620
```

OS MARPAT 124:289261

AB Title compds. I [W = C(OMe), C(halo), N, etc.; L = (substituted) alkenyl, alkyl, aryloxy, etc.; Z = (substituted) alkenyl, alkyl, aryl, heterocycloalkyl, etc.], useful in the prophylaxis and treatment of asthma, were prepd. Treatment of (R)-I [W = C(OMe); L = OH; Z = RCH2CH(Ph) wherein R = 4-pyridinyl] with t-BuOK in THF/DMF followed by addn. of PhCH2Br afforded (R)-I [W = C(OMe); L = OCH2Ph; Z = RCH2CH(Ph)]. Compds. I showed a concn.-dependent inhibition of recombinant PDE IV at 0.1-1000 nM with little or no activity against PDE I, II, III or V at concns. up to 100 .mu.M.

- L3 ANSWER 58 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1995:851671 CAPLUS
- DN 123:256505
- TI Amidine derivatives with nitric oxide synthetase activities
- IN Gentile, Robert James; Murray, Robert John; MacDonald, James Edwin; Shakespeare, William Calvin
- PA Fisons Corp., UK; Fisons PLC
- SO PCT Int. Appl., 103 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

| TVM. | PATENT NO. | KIND DATE | APPLICATION NO. DATE | |
|------|---|---|--|---|
| PI | W: AM, AT,
GE, HU,
NL, NO,
RW: KE, MW, | AU, BB, BG, BR, BY, JP, KE, KG, KP, KR, NZ, PL, PT, RO, RU, SD, AT, BE, CH, DE, | WO 1994-GB1767 199408 CA, CH, CN, CZ, DE, DK, E KZ, LK, LT, LU, LV, MD, M SD, SE, SI, SK, TJ, TT, U DK, ES, FR, GB, GR, IE, I CI, CM, GA, GN, ML, MR, N GB 1993-16806 A 199308 GB 1993-19835 A 199309 | ES, FI, GB, MG, MN, MW, JA, US, UZ, VN TT, LU, MC, JE, SN, TD, TG |
| | CA 2169280 | AA 19950223 | GB 1993-25410 A 199312 GB 1994-1580 A 199401 GB 1994-11700 A 199406 CA 1994-2169280 199408 GB 1993-16806 A 199309 GB 1993-19835 A 199309 GB 1993-25410 A 199312 GB 1994-1580 A 199401 GB 1994-11700 A 199406 | .27
510
512
512
525
11
27 |
| | AU 9473875
AU 682381 | A1 19950314
B2 19971002 | AU 1994-73875 199408 GB 1993-16806 A 199308 GB 1993-19835 A 199309 | 12
12 |

| ZA 94
EP 71:
EP 71: | 3483 | A
A1
B1 | 19950419
19960529
20030115 | | GB
GB
WO
ZA
GB | 1993-25410
1994-1580
1994-11700
1994-GB176
1994-6095
1993-16806
1994-923776 | A
A
7 W | 19940812 | | | |
|---------------------------|-----------|---------------|----------------------------------|-----|--|---|----------------------------|--|-----|-----|----|
| R | : AT, BE, | CH, DE | , DK, ES, | FR, | GB
GB
GB
GB | GR, IE, IT,
1993-16806
1993-19835
1993-25410
1994-1580
1994-11700 | A
A
A
A | 19930812
19930925
19931211
19940127
19940610 | NL, | PT, | SE |
| CN 11:
CN 10 | | A
B | 19961002
20010926 | | | 1994-193688 | | 19940812 | | | |
| BR 940 | 07515 | А | 19970107 | | GB
BR
GB | 1993-16806
1993-19835
1994-7515
1993-16806
1993-19835 | A
A | 19930925
19940812 | | | |
| JP 09! | 501918 | Т2 | 19970225 | | GB
GB
WO
JP
GB | 1993-25410
1994-1580
1994-11700
1994-GB176
1994-506814
1993-16806
1993-19835 | A
A
A
W
1 | 19931211
19940127
19940610
19940812
19940812 | | | |
| ни 758 | 876 | A2 | 19970528 | | GB
GB
WO
HU
GB
GB | 1993-25410
1994-1580
1994-11700
1994-GB1767
1996-310
1993-16806
1993-19835 | A
A
A
W
A
A | 19940127
19940610
19940812
19940812
19930812
19930925 | | | |
| IL 110 | 0643 | A1 | 19980715 | | GB
GB
IL
GB
GB
GB | 1993-25410
1994-1580
1994-11700
1994-110643
1993-16806
1993-19835
1993-25410 | A
A
A
A
A | 19940812
19930812
19930925
19931211 | | | |
| RU 21 | 30017 | C1 | 19990510 | | GB
RU
GB
GB | 1994-1580
1994-11700
1996-104356
1993-16806
1993-19835 | A
A
A | 19940127
19940610
19940812
19930812
19930925 | | | |
| PL 180 | 0081 | В1 | 20001229 | | GB
GB
WO
PL
GB
GB
GB | 1993-25410
1994-1580
1994-11700
1994-GB176
1994-312961
1993-16806
1993-19835
1993-25410
1994-1580 | A
A
W
A
A
A | 19931211
19940127
19940610
19940812
19940812
19930812
19930925
19931211
19940127 | | | |

| 09951006.3 | Page | 84 |
|------------|------|----|
|------------|------|----|

MARPAT 123:256505

| АТ | 231126 | E | 20030215 | GB
WO
AT
GB
GB
GB
GB
GB | 1994-11700
1994-GB1767
1994-923776
1993-16806
1993-19835
1993-25410
1994-1580
1994-11700
1994-GB1767 | W
A
A
A
A | 19940610
19940812
19940812
19930812
19930925
19931211
19940127
19940610
19940812 |
|----|---------|---|----------|--|--|-----------------------|--|
| បន | 5807885 | Α | 19980915 | US | 1996-586761 | T.7 | 19960130 |
| ИО | 9600534 | A | 19960411 | WO
NO
GB
GB
GB
GB
GB | 1994-GB1767
1996-534
1993-16806
1993-19835
1993-25410
1994-1580
1994-11700
1994-GB1767 | A
A
A
A | 19940812
19960209
19930812
19930925
19931211
19940127
19940610
19940812 |
| FI | 9600628 | A | 19960212 | FI
GB
GB
GB
GB
GB | 1996-628
1993-16806
1993-19835
1993-25410
1994-1580
1994-11700
1994-GB1767 | A
A
A
A | 19960212
19930812
19930925
19931211
19940127
19940610
19940812 |
| US | 6030985 | А | 20000229 | US
GB
GB
GB
GB | 1998-111926
1993-16806
1993-19835
1993-25410
1994-1580
1994-11700 | A
A
A | 19980708
19930812
19930925
19931211
19940127
19940610 |

Title compds. I [D = Ph, pyridinyl, 5-membered heterocyclic arom. ring contg. 1-4 O, S and/or N atoms, or perfluoroalkyl, with 1st 3 groups optionally substituted by alkyl, alkoxy, halo, and/or perfluoroalkyl; R1 = H, alkyl, halo; R2 = X(CH2)nZCONR3R4, X(CH2)nNHCO(CH2)sNR3R4, X(CH2)pNR3R4, X(CH2)nNHCOR5, or (CH2)qNHC(:NH)R6; X = O, bond; Z = O, NR7, bond; R3, R4 = H, alkyl, (CH2)rA, (CH2)mOA, CHMe(CH2)tA; or NR3R4 = 1-indanyl (sic), piperonylamino, piperidinyl, morpholinyl, pyrrolidinyl, 1,2,3,4-tetrahydroisoquinolinyl, (4-alkyl)piperazinyl; R5 = alkyl, perfluoroalkyl, (CH2)rA, O(CH2)wA; A = (un)substituted Ph, pyridinyl, pyrimidinyl, 5-membered heteroaryl; R6 = (un)substituted Ph, pyridinyl, 5-membered heteroaryl, perfluoroalkyl; R7 = H, alkyl; n, r = 0-6; p, w = 1-5; m = 2-5; q, t = 0-5; s = 1-3; 8 addnl. provisos] and pharmaceutically acceptable salts are described, together with processes for their prepn.

Patel

OS GI and compns. contg. them. I have nitric oxide synthetase (II) inhibitory activity, and are potentially useful for treatment of neurodegenerative disorders, migraine, tolerance to opiates and diazepines, and drug addiction. For example, 4-nitrophenethylamine-HCl underwent N-trifluoroacetylation (80%), N-benzylation using NaH and PhCH2Br in THF (44%), hydrogenation of the nitro group over Pd/C (used directly), and condensation of the resultant amine with S-methyl-2-thiophenethiocarboximide hydriodide and simultaneous hydrolysis of the amide (34%) to give title compd. III. In a screen for activity against a neuronal isoform of II, III showed an IC50 of < 10 .mu.M, indicating therapeutic utility. III also showed > 10-fold less potency against macrophage and endothelial isoforms of II, indicating desirable selectivity. Approx. 250 specific I and salts were prepd. and/or claimed, and 72 synthetic examples are given.

L3 ANSWER 59 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

Page 85

- AN 1995:305146 CAPLUS
- DN 122:80891
- TI Preparation of arylurea and amide derivatives and their use in the control of cell membrane potassium channels
- IN Olesen, Soeren-Peter; Moldt, Peter; Pedersen, Ove
- PA Neurosearch A/S, Den.
- SO PCT Int. Appl., 56 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

| FAN. | N.CNT 1 PATENT NOWO 9422807 | | | | KII | ND | DATE | | | A | PPLI | CATI | N NC | 0. | DATE | | | | |
|------|-----------------------------|------|------|-----|-----|----------|--------------------------|------|---------------|------------|--------------|----------------|------------|------------|----------------------|--------------|-----|-----|----|
| PI | WO | | AU, | BB, | BG, | BR, | R, BY, CA,
O, NZ, PL, | | CN, | CZ, | FI, | HU, | JP, | KP, | KR, | KZ, | LK, | LV, | |
| | | RW: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB,
GN, | GR,
ML, | IE,
MR, | IT,
NE, | LU,
SN, | MC, | NL,
TG | PT, | SE, | |
| | CA | 2160 | 128 | | A | A | 1994 | 1013 | | C | A 19 | 94-2 | 1601 | 28 | | 0330 | | | |
| | ΑU | 9465 | 378 | | A. | 1 | 1994 | 1024 | AU 1994-65378 | | | | | | 1994 | 0330 | | | |
| | ΑU | 6836 | 54 | | B | 2 | 1997 | 1120 | | | | | | | | | | | |
| | EP 693053 | | | | | | | | | | | | | | 1993
1994 | | | | |
| | EP 693053 | | | | A. | 1 | 1996 | 0124 | | E | P 19 | 94-9 | 1309 | 5 | 1994 | 0330 | | | |
| | EP | 6930 | 53 | | B | 19990120 | | | | | | | | | | | | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | Di | K 19 | 93-4 | 11 | | LU,
1993
1994 | 0407 | NL, | PT, | SE |
| | JP | 0851 | 0448 | | T. | 2 | 1996 | 1105 | | J)
Di | P 19
K 19 | 94-5:
93-4: | 2167
11 | 4 | | 0330
0407 | | | |
| | АТ | 1759 | 55 | | E | | 1999 | 0215 | | A. | г 19 | 94-9
93-4 | 1309 | 5 | 1994
1993 | 0330 | | | |
| | FI | 9504 | 746 | | A | | 1995 | 1117 | | Di | K 19 | | 11 | | 1995
1993
1994 | 0407 | | | |
| | NO | 9503 | 956 | | A | | 1995 | 1207 | | No | 19 | 95-3 | 956 | | 1995
1993 | 1005 | | | |

WO 1994-EP1008 19940330

US 5696138 A 19971209 US 1995-535267 19951227 DK 1993-411 19930407 WO 1994-EP1008 19940330

OS MARPAT 122:80891 GI

R11

HO

R1

$$D-R^2$$
 R^{12}

A

 R^4
 R^3
 R^3
 R^4

AΒ Title compds. I (X, Z = HN, H2C, at least one of X and Z being HN; Y = O,S, NCN, HN; B, D, E, F = C, N, at least 3 of B, D, E, and F being C; R1, R4 = H, halo, F3C, HO2C, alkyl-O2C, aryl-O2C, H2NCO, NC, alky, alkoxy, HO, etc.; R2 = H, F3C, HO2C NC, HOCH2, aryloxy, etc.; R3 = H, halo, HO2C, NC, alkylcarbonyl, etc.; R2R3, R3R4 with the Cs to which they are attached form an (unsatd.) addnl. fused carbocyclyl; one of R11, R12 = halo, F3C, HO2C, NC, alkyl, aloxy HO, O2N, HOCH2, etc. and the other is H; A = H, AR12 and the Cs to which they are attached form (unsatd.) fused carbocyclyl) or a salt thereof, are prepd. I are claimed for treatment of arterial hypertension, coronary artery spasms, asthma, irritable bowel syndrome, spastic bladder, ischemia, psychosis, convulsions. 2-Hydroxy-5-nitroaniline and 3-(trifluoromethyl)phenyl isocyanate were added to MePh and stirred overnight at room temp. to give I (X, Z = HN, Y = 0, B, D, E, F, = C, R1 = R3 = $\overline{R4}$ = R12 = H, $\overline{R2}$ = $\overline{O2N}$, R11 = F3C) (II). The activity (1-10 .mu.M) was demonstrated by I (R2 = H, R3 = C1,everything else as in II). Pharmaceutical formulations comprising I are given.

L3 ANSWER 60 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1994:655671 CAPLUS

DN 121:255671

TI Preparation of N-phenyl-N'-heteroarylureas as 5HT2C receptor antagonists

IN Forbes, Ian Thomson; Ham, Peter; Martin, Roger Thomas; Thompson, Mervyn

PA SmithKline Beecham PLC, UK

SO PCT Int. Appl., 28 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|----|-------------------------|------------------------------------|----------------------------------|------------------------------|
| PI | WO 9418170
W: JP, US | A1 19940818 | WO 1994-EP189 | 19940125 |
| | RW: AT, BE, | CH, DE, DK, ES, FR, | GB, GR, IE, IT, LU, GB 1993-2275 | , MC, NL, PT, SE
19930205 |
| | EP 682656
R: BE, CH, | A1 19951122
DE, FR, GB, IT, LI, | EP 1994-905697 | 19940125 |
| | | | GB 1993-2275
WO 1994-EP189 | 19930205
19940125 |
| | JP 08506114 | T2 19960702 | JP 1994-517583 | 19940125 |

Patel

| GB | 1993-2275 | 19930205 |
|----|------------|----------|
| WO | 1994-EP189 | 19940125 |

OS MARPAT 121:255671

R1NR2CONR3R4 [R1 = (un)substituted (iso)quinolinyl, -heteroaryl; R2,R3 = AB H, alkyl; R4 = (un) substituted Ph] were prepd. Thus, nicotinoyl azide was refluxed in PhMe after which 3,4-ClMeC6H3NH2 was added to give, after acidification, 3,4-ClMeC6H3NHCONHR1.HCl (R1 = 3-pyridyl) which had ID50 of 78mg/kg orally against mCPP-induced hypolocomotion in rats.

L3 ANSWER 61 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1994:107056 CAPLUS

DN120:107056

TI Preparation of 2-anilinopyrimidines as antiatherosclerotics and neoplasm inhibitors

IN Zimmermann, Juerg

PA Ciba-Geigy A.-G., Switz. SO Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW DT

Patent LA German

FAN.CNT 3

| | PA' | TENT NO. | | KIN | | E | | | PLICATION NO | ٠. | DATE | | |
|----|----------|---------------------|-----|----------|--------------|--------------------|-----|----------|--------------------------|--------|----------------------|-----|----|
| PI | EP
EP | 564409
564409 | | A1 | 199 |
31006
00119 | | | 1993-810219 |) | 19930325 | | |
| | | R: AT, | BE, | CH, | DE, DK | , ES, | FR, | GB, | GR, IE, IT,
1992-1083 | LI | , LU, NL, | PT, | SE |
| | ΑT | 188964 | | E | 200 | 00215 | | AT | 1993-810219 |) | 19930325 | | |
| | ES | 2142857 | | Т3 | 200 | 00501 | | ES | 1992-1083
1993-810219 |) | 19930325 | | |
| | | 2093203 | | AA
C | 199 | 31004 | | CH
CA | 1992-1083
1993-209320 | A
3 | 19920403
19930401 | | |
| | CA | 2093203 | | С | 200 | 21126 | | | | | 19920403 | | |
| | CZ | 283944 | | В6 | 199 | 80715 | | CZ | 1993-560
1992-1083 | | 19930401 | | |
| | RU | 2125992 | | C1 | 1999 | 90210 | | RU | 1993-5357 | | 19930401 | | |
| | IL | 105264 | | A1 | 1999 | 90411 | | | 1992-1083
1993-105264 | | 19920403
19930401 | | |
| | SK | 280620 | | В6 | 2000 | 00516 | | CH
SK | 1992-1083
1993-280 | | 19920403
19930401 | | |
| | MО | 9301283 | | A | | 31004 | | CH | 1992-1083
1993-1283 | | 19920403 | | |
| | | | | | | | | CH | 1992-1083 | | 19930402
19920403 | | |
| | ZA | 9302397 | | A | | 31004 | | | 1993-2397
1992-1083 | | 19930402
19920403 | | |
| | | 9335694
666709 | | A1
B2 | 1993
1996 | 31007
50222 | | | | | 19930402 | | |
| | CN | 1077713 | | | | 31027 | | | | | 19920403 | | |
| | | 1043531 | | A
B | | 90602 | | CN | 1993-103566 | | 19930402 | | |
| | HU | 64050 | | A2 | 1993 | 31129 | | HU | 1993-982 | | 19920403
19930402 | | |
| | | 06087834
2706682 | | A2
B2 | 1994
1998 | 0329
0128 | | | 1992-1083
1993-78096 | | 19920403
19930405 | | |

CH 1992-1083 A 19920403

PATENT FAMILY INFORMATION:

| | | | NO. | | | | DATE | | | | | | ON N | | DATE | | | | |
|----------|-------------------|------|-------------|------------|-----------------|------|----------|------|-----|------|-------------|------|------|-------|----------------|------|-----|-----|----|
| ΡI | | | | | | | | | | | | | | | 1994 | 0921 | | | |
| | | W: | KR, | ΚZ, | | LR, | LT, | | | | | | | | HU,
RO, | | | | |
| | | RW: | KE, | MW,
NL, | SD, | SZ, | ΑT, | | | | | | | | GR,
ML, | | | | |
| | | | | | | | | | | | | | | | 1993
1994 | | | | |
| | US | 5543 | 3520 | | А | | 1996 | 0806 | | | | | | | 1994 | | | | |
| | - | 0010 | 7020 | | | | 2000 | | | C | H 19 | 93-2 | 966 | Α | 1993 | 1001 | | | |
| | | | | | | _ | | | | | | | | | 1994 | | | | |
| | CA | 2148 | 3477 | | A | A. | 1995 | 0413 | | | | | | | 1994
1993 | | | | |
| | 73.11 | 9476 | 975 | | A | 1 | 1995 | 0501 | | | | | | | 1994 | | | | |
| | | | 304 | | | | | - | | ה | 0 10 | J. , | 0575 | | 1001 | 0721 | | | |
| | 1.0 | | | ٥. | _ | 2000 | 0,00 | | C | н 19 | 93-2 | 966 | Α | 1993 | 1001 | | | | |
| | | | | | | | | | C | H 19 | 94-2 | 278 | Α | 1994 | 0718 | | | | |
| | | | | | 1005000 | | | | | | | | | | 1994 | | | | |
| | ΕP | | | | | | 19950920 | | | | | | | | 1994 | | | | |
| | | R: | ΑT, | BE, | CH, DE, DK, ES, | | | ES, | FR, | | | | | | | | NL, | PT, | SE |
| | | | | | | | | | | | | | | | 1993:
1994: | | | | |
| | | | | | | | | | | | | | | | 1994 | | | | |
| | ďΡ | 0850 | 1834 | | Т: | 2 | 1996 | 0528 | | | | | | | 1994 | | | | |
| | 0. | | , | | | _ | | | | | | | | | 1993 | | | | |
| | | | | | | | | | | | | | | | 1994 | | | | |
| | | | | | | | | | | M |) 19 | 94-E | P314 | 9 W | 1994 | 0921 | | | |
| FAN | PA7 | CENT | 0210
NO. | | | | _ | | | A | PPLI | CATI | ON N | ο. | DATE | | | | |
| PI | | | .184 | | | | | | | |
c 10 | 01-2 | 3188 |
a | 1994 | 0428 | | | |
| LT | US | 3321 | .104 | | А | | 1,550 | 0320 | | | | | | | 1992 | | | | |
| | | | | | | | | | | | | | | | 1993 | | | | |
| | | | | | | | | | | | - | | _ | | 1993 | | | | |
| | CA | 2148 | 3477 | | A | A | 1995 | 0413 | | C | A 19 | 94-2 | 1484 | 77 | 1994 | 0921 | | | |
| | | | | | | | | | | C | н 19 | 93-2 | 966 | Α | 1993 | 1001 | | | |
| OS
GI | MARPAT 120:107056 | | | | | | | | | | | | | | | | | | |

$$R^{1}$$
 R^{8}
 R^{7}
 R^{2}
 N
 R^{3}
 R^{4}
 R^{5}

AB Title compds. [I; R1 = pyridyl, 4-pyrazinyl, (acyl)aminophenyl, etc.; R2, R3 = H, alkyl; 1 or 2 of R4-R8 = NO2, fluoroalkoxy, NR9C(:X)YnR10 and the others = H, alkyl, alkanoyl, CF3, etc.; R9 = H, alkyl; R10 = (cyclo)aliph. group, heterocyclyl, aryl, etc.; X = O, S, NH, etc.; Y = O or NH; n = O or 1] were prepd. Thus, 3-(O2N)C6H4NHC(:NH)NH2 [prepn. from 3-(O2N)C6H4NH2 given] was cyclocondensed with R1COCH:CHNMe2 (R1 = 3-pyridyl) (prepn. from 3-acetylpyridine given) to give I (R1 = 3-pyridyl, R2 = R3 = R5-R8 = H, R4 = NO2). I had IC50 of .apprx.0.5 to 5 .mu.M against protein kinase C in vitro.

```
L3
     ANSWER 62 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
     1994:77171 CAPLUS
AN
DN
     120:77171
ΤI
     Preparation of indolylurea derivatives as antagonists
IN
     Forbes, Ian Thomson; Martin, Roger Thomas; Jones, Graham Elgin
PA
     SmithKline Beecham PLC, UK
SO
     PCT Int. Appl., 36 pp.
     CODEN: PIXXD2
DT
     Patent
ĽΑ
    English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                        APPLICATION NO. DATE
                     _____
                                         ______
    WO 9318028
PΙ
                    A1 19930916
                                         WO 1993-GB449 19930304
        W: AU, CA, JP, KR, NZ, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                         GB 1992-5415
                                                          19920312
                                          GB 1992-5416
                                                          19920312
                                          GB 1992-5422
                                                          19920312
                                         GB 1992-5442
                                                          19920312
    AU 9336411
                     A1
                           19931005
                                         AU 1993-36411
                                                          19930304
                                         GB 1992-5415
                                                          19920312
                                         GB 1992-5416
                                                          19920312
                                         GB 1992-5422
                                                          19920312
                                         GB 1992-5442
                                                          19920312
                                         WO 1993-GB449
                                                          19930304
                     A1
                           19941228
                                         EP 1993-905507
                                                          19930304
        R: BE, CH, DE, FR, GB, IT, LI, NL
                                         GB 1992-5415
                                                          19920312
                                         GB 1992-5416
                                                          19920312
                                         GB 1992-5422
                                                          19920312
                                         GB 1992-5442
                                                         19920312
                                         WO 1993-GB449
                                                          19930304
    JP 07504429
                     T2
                          19950518
                                         JP 1993-515449
                                                          19930304
                                         GB 1992-5415
                                                          19920312
                                         GB 1992-5416
                                                          19920312
                                         GB 1992-5422
                                                         19920312
                                         GB 1992-5442
                                                         19920312
                                         WO 1993~GB449
                                                         19930304
    ZA 9301713
                     Α
                          19940922
                                         ZA 1993-1713
                                                         19930310
                                         GB 1992-5415
                                                         19920312
    US 5508288
                     Α
                          19960416
                                         US 1994-295694
                                                         19940830
                                         GB 1992-5415
                                                         19920312
                                         GB 1992-5416
                                                          19920312
```

19920312

19920312

19930304

GB 1992~5422

GB 1992-5442

WO 1993-GB449

MARPAT 120:77171 OS GΙ

Title compds. I (P = quinolinyl, isoquinolyl, 5,6-membered heterocyclyl; AΒ R1 = H, C1-6 alkyl; R2, R3, R10, R11 = C2-6 alkylene; R4 = H, C1-6 alkyl, halo, R8R9N, R12O, R12O2C wherein R8, R9, R12 = H, C1-6 alkyl; R5, R6 = H, C1-6 alkyl; R7 = H, C1-6 alkyl, C1-6 alkoxy, halo; etc.) or a salt thereof, are prepd. to NaH was added 5-amino-3-methylbisthiazole-HCl followed by N-(1-methyl-5-indolyl)carbamate (prepn. given) to give the title compd. II. The affinity of II for 5-HT1C binding site by assessing its ability to displace [3H]-mesulergine from 5-HT1C binding sites was shown by pA2 as 7.9.

ANSWER 63 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN L3

AN 1993:552116 CAPLUS

DN119:152116

ΤI Use of renin inhibitors for the treatment of glaucoma

Tanaka, Yoko; Kagayama, Akira; Hata, Takehisa IN

PAFujisawa Pharmaceutical Co., Ltd., Japan

PCT Int. Appl., 25 pp. SO CODEN: PIXXD2

DTPatent

English LΑ

FAN.CNT 1

| | PATENT NO. | KIND DATE | APPLICATION NO. DATE |
|----|-------------|-----------------------------------|---|
| PI | | A1 19930708
HU, JP, KR, RU, US | WO 1992-JP1656 19921218 |
| | RW: AT, BE, | CH, DE, DK, ES, FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE
GB 1991-27041 19911220 |
| | ZA 9209738 | A 19930617 | ZA 1992-9738 19921215
GB 1991-27041 19911220 |
| | AU 9331712 | A1 19930728 | AU 1993-31712 19921218 |
| | AU 661748 | B2 19950803 | GB 1991-27041 19911220
WO 1992-JP1656 19921218 |
| | EP 617622 | A1 19941005 | EP 1993-900396 19921218 |
| | R: AT, BE, | CH, DE, DK, ES, FR, | GB, GR, IE, IT, LI, LU, NL, PT, SE
GB 1991-27041 19911220
WO 1992-JP1656 19921218 |
| | JP 07506807 | T2 19950727 | JP 1992-511545 19921218 |

| | | | | GB | 1991-27041 | 19911220 |
|----|-------------------|---|----------|----|-------------|----------|
| | | | | WO | 1992-JP1656 | 19921218 |
| | CN 1088934 | Α | 19940706 | CN | 1993-101190 | 19930102 |
| | | | | GB | 1991-27041 | 19911220 |
| os | MARPAT 119:152116 | ; | | | | |
| GI | | | | | | |

AB The renin-inhibiting histidine derivs. I [R1 = (un)substituted alkyl or amino; R2, R3 = H, alkyl; NR1R2 = heterocyclyl; R4 = alkyl] or I salts are drugs for the treatment of glaucoma. Eye application of 0.2% 2(S)-[N.alpha.-[2(S)-[N-methyl-N-[2-[N-(morpholinocarbonyl)-N-methylamino]ethyl]aminocarbonyloxy]-3-phenylpropionyl]-N.alpha.-methyl-L-histidyl]amino-1-cyclohexyl-3(S)-hydroxy-6-methylheptane-HCl lower intraocular pressure in the rabbit.

- L3 ANSWER 64 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1991:449694 CAPLUS
- DN 115:49694
- TI Preparation of arylazole platelet activating factor (PAF) antagonists
- IN Schromm, Kurt; Mentrup, Anton; Renth, Ernst Otto; Birke, Franz; Heuer, Hubert; Muacevic, Gojko
- PA Boehringer Ingelheim K.-G., Germany
- SO Ger. Offen., 21 pp.

CODEN: GWXXBX

- DT Patent
- LA German
- FAN.CNT 2

| ran. | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------------|------------------|----------------------------|---|--|
| PI | | | 19910307
J, JP, KR, NO, | DE 1989-3927483
WO 1990-EP1340
, SU, US
, GB, IT, LU, NL, SE | 19890819
19900816 |
| | WO 9102731
W: AU, | Al
CA, FI, HU | 19910307
J, JP, KR, NO, | DE 1989-3927483
WO 1990-EP1341 | 19890819
19900816 |
| | AU 9061571 | Al | 19910403 | DE 1989-3927483 DE 1989-3929655 AU 1990-61571 DE 1989-3927483 | 19890819
19890906
19900816
19890819 |
| | AU 9061600 | A1 | 19910403 | DE 1989-3929655
WO 1990-EP1341
AU 1990-61600
DE 1989-3927483 | 19890906
19900816
19900816
19890819 |

| | DD 298928 | A 5 | 19920319 | | WO 1990-EP1340
DD 1990-343519
DE 1989-3927483 | 19900816
19900817
19890819 |
|----------|------------------------|------------|-----------|-----|---|----------------------------------|
| PATE | NT FAMILY INFORM | ATION: | | | | |
| FAN | 1991:449686 PATENT NO. | KIND | DATE | | APPLICATION NO. | DATE |
| ΡI | DE 3929655 | A 1 | 19910307 | | DE 1989-3929655 | 19890906 |
| | WO 9102731 | A1 | 19910307 | | WO 1990-EP1341 | 19900816 |
| | ., | FI, HU | , JP, KR, | NO, | SU, US | |
| | RW: AT, BE, | CH, DE | , DK, ES, | FR, | GB, IT, LU, NL, SE | |
| | · | | | | DE 1989-3927483 | 19890819 |
| | | | | | DE 1989-3929655 | 19890906 |
| | AU 9061571 | A1 | 19910403 | | AU 1990-61571 | 19900816 |
| | | | | | DE 1989-3927483 | 19890819 |
| | | | | | DE 1989-3929655 | 19890906 |
| | | | | | WO 1990-EP1341 | 19900816 |
| OS
GI | MARPAT 115:4969 | 4 | | | | |

$$M = U$$
 R^1QT
 VR^2
 $Q1$
 $Q1$
 $Q1$
 $Q2XYQ^3R^3$ I
 $Q2XYQ^3R^3$ I

AB Title compds. [I; R1 = (substituted) Ph, 5- or 6-membered heteroaryl; R2 = H, (unsatd.) (O-, S-, or imino-interrupted) (substituted) alkyl, cycloaliphatyl, aminoalky; R3 = (substituted) (polynuclear) (arom.) carbocyclyl, N-heterocyclyl; M, U = N, alkylimino, CH, alkylmethine; T, V, W = N, C; M, V may addnl. = S; B = CH:CH, S, O, imino, etc.; Q-Q3 = bond, C1-3 alkylene; dotted lines = double bonds when possible], were prepd. as PAF antagonists (no data). Thus, 3,5-(MeO)2C6H3CO2H was refluxed with SOC12 in CHC13 to give the acid chloride, which was condensed with 4-H2NC6H4CO2Et in the presence of Et3N to give the amide, which was refluxed with PC15 in PhMe to give the imide chloride. This was stirred with NaN3 in DMF to give Et 4-[5-(3,5-dimethoxyphenyl)-1H-tetrazol-1-yl]benzoate. The latter was treated as above to give the acid chloride, which was heated with 3-aminopyridine in dioxane to give title compd. II.

=> d 16 fbib hitstr abs total

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:892800 CAPLUS

TI Preparation of substituted **pyrazines** as protein kinase modulators

IN Buhr, Chris A.; Baik, Tae-Gon; Ma, Sunghoon; Tesfai, Zerom; Wang,

Longcheng; Co, Erick Wang; Epshteyn, Sergey; Kennedy, Abigail R.; Chen, Baili; Dubenko, Larisa; Anand, Neel Kumar; Tsang, Tsze H.; Nuss, John M.; Peto, Csaba J.; Rice, Kenneth D.; Ibrahim, Mohamed Abdulkader; Schnepp, Kevin Luke; Shi, Xian; Leahy, James William; Chen, Jeff; Dalrymple, Lisa Esther; Forsyth, Thimothy Patrick; Huynh, Tai Phat; Mann, Grace; Mann, Lary Wayne; Takeuchi, Craig Stacy

PA Exelixis, Inc., USA

SO PCT Int. Appl., 468 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PAT | CENT | | | KIND DATE | | | | | APPLICATION NO. DATE | | | | | | | | |
|----|---------|---------|-------------------|-----|-----------|-----|-----|----------|-----|----------------------|-----|-----|-----|-----|------|-----|-----|-----|
| PI | WO | 2003 | | 97 |
A | | |
1113 | | | | | | | 2003 | | | |
| | | W: | ΑE, | AG, | ΑL, | AM, | AT, | ΑU, | AZ, | BA, | BB, | ВG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, HR, | | HR, | HU, | ID, | ΙL, | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | LS, LT, | | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | ΜX, | MZ, | NI, | NO, | NZ. | OM. | |
| | | | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | ТJ, | TM, | TN, | TR. | TT. |
| | | | $TZ_{ ightarrow}$ | UA, | UG, | US, | UΖ, | VC, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | KZ, |
| | | | MD, | RU, | ТJ, | TM | | | | | | | | | | | - | - |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | ΑT, | BE, | BG, |
| | | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FΙ, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, |
| | | | NL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GO, |
| | GW, ML, | | ML, | MR, | NE, | SN, | TD, | TG | | | | • | • | • | • | | ~, | |

IT INDEXING IN PROGRESS

GΙ

AB This invention relates to compds. I [R1 = H, halo, CN, etc.; R2, R3 = H, alkyl, aryl, etc.; R4 = H, alkyl, aryl, etc.; Z = N, CH; A = CO, CS, C(:NR6), R7 (when A = R7, E does not exist); R6 = H, NO2, CN, etc.; R7 = (un) substituted 5-7 membered heterocyclyl; E = NR8R9, NNR2R3, OR4, etc.; R8 = H, alkyl; R9 = H, heteroarylalkyl, etc.; NR8R9 = (un)substituted 5-7 membered heteroalicyclyl; W = 6-10 membered arylene, 5-10 membered heteroarylene; X = a bond, (un) substituted alkylene, O(CH2)2-30, etc.; Y =H, alkyl, aryl, etc.; with provisos] for modulating protein kinase enzymic activity for modulating cellular activities such as proliferation, differentiation, programmed cell death, migration and chemoinvasion, and to pharmaceutical compns. contg. such compds. Even more specifically, the invention relates to compds. I that inhibit, regulate and/or modulate kinases, particularly Checkpoint Kinases, even more particularly Checkpoint Kinase 1, or Chk1. Prepn. of representative compds. I is described. Thus, amidation of 3-amino-6-phenylpyrazinecarboxylic acid (prepn. given) with benzylamine afforded 67% 3-amino-6-phenyl-N-(phenylmethyl)pyrazine-2-carboxamide which showed IC50 of 10,000

Patel

US 2002-377933PP 20020503

nM or greater against Chk1. Table presenting activity data with respect to Chk1 for over 1000 compds. I is given. Methods of therapeutically or prophylactically using the compds. I and compns. to treat kinase-dependent diseases and conditions are also an aspect of the invention, and include methods of treating cancer, as well as other disease states assocd. With unwanted angiogenesis and/or cellular proliferation, by administering effective amts. of such compds.

- L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:282394 CAPLUS
- DN 138:304265
- TI Preparation of N-pyrrolopyridinyl carboxamides as **Chk1** kinase inhibitors for treating various forms of cancer and hyperproliferative disorders
- IN Stavenger, Robert A.; Witherington, Jason; Rawlings, Derek A.; Holt, Dennis A.; Chan, George.
- PA Smithkline Beecham Corporation, USA; Smithkline Beecham Plc
- SO PCT Int. Appl., 62 pp.
- CODEN: PIXXD2
- DT Patent LA English
- FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2003028724 A1 20030410 WO 2002-US31842 20021004

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,

PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2001-326974PP 20011004

OS MARPAT 138:304265

GI

$$R^{1}$$
 N
 N
 N
 N

AB N-pyrrolopyridinyl carboxamides (shown as I; variables defined below; e.g. N-(5-phenyl-1H-pyrrolo[2,3-b]pyridin-3-yl)benzamide) useful in the inhibition of damage response kinases (no data) are provided. Although the methods of prepn. are not claimed, 94 example prepns. are included. For I: R1 is aryl or heteroaryl, wherein aryl or heteroaryl may optionally be substituted by .gtoreq.1 of group A and on any position with the exception that R1 is not 3,4-dichlorophenyl; A = Cl-10 alkyl, Cl-10 alkanoyl, C2-10 alkenyl, C2-10 alkynyl, C3-10 cycloalkyl, C0-6 alkylaryl,

CO-6 alkylheterocyclyl, CO-6 alkylheteroaryl, C(:NH)R3, COR3, CONR3R4, CON(0)R3R4, CO2R3, C(0)SR3, C(S)R3, cyano, trifluoromethyl, NR3R4, N(0)R3R4, NR3COR4, NR3CONR4R5, NR3CON(0)R4R5, NR3CO2R3, NR3C(0)SR3, NR3SO2R3, nitro, OR3, OCF3, aryloxy, heteroaryloxy, SR3, S(0)R3, S(0)2R3, SCF3, S(0)CF3, S(0)2CF3, SO2NR3R4, SO3R3, PO3R3R4, and halo, wherein C1-10 alkyl, C1-10 alkanoyl, C2-10 alkenyl, C2-10 alkynyl, C3-10 cycloalkyl, C0-5 alkylaryl, C0-5 alkylheterocyclyl, C0-5 alkylheteroaryl, (CH2)0-5 heteroaryl, aryloxy, and heteroaryloxy may be optionally substituted by .gtoreq.1 of group B (see claims) and on any position. R2 = C1-8 alkyl, C2-8 alkenyl, C3-6 cycloalkyl, OR9, NR10R11, Ph, pyridyl, pyridazinyl, pyrimidinyl, pyrazolinyl, thiazinyl, pyrrolyl, furyl, thienyl, pyrazolyl, imidazolyl, triazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl and thiadiazolyl; addnl. details are in the claims.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2002:695962 CAPLUS

DN 137:232680

Preparation of aryl and heteroaryl urea selective Chk1 inhibitors for use as radiosensitizers and chemosensitizers for treating diseases and conditions related to DNA damage or lesions in DNA replication

IN Keegan, Kathleen S.; Kesicki, Edward A.; Gaudino, John Joseph; Cook, Adam Wade; Cowen, Scott Douglas; Burgess, Laurence Edward

PA Icos Corporation, USA

SO PCT Int. Appl., 236 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| 11111 | | CENT 1 | NO. | | KIND DATE | | | | APPLICATION NO. DATE | | | | | | | | | | |
|-------|----|--------|------|-----|--------------|-----|------|------|---------------------------|-----|------|------|------|-----|------|------|-----|-----|----|
| PI | WO | 2002 | 0704 | 94 | A: | 1 | 2002 | 0912 | | W | 20 | 02-U | 5645 | 2 | 2002 | 0301 | | | |
| | | w: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, | |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, | |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TN, | TR, | TT, | TZ, | |
| | | | UA, | UG, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | ΤZ, | UG, | ZM, | ZW, | AT, | BE, | CH, | |
| | | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | ΝE, | SN, | TD, | TG | |
| | | | | | | | | | US 2001-273124PP 20010302 | | | | | | | | | | |
| | US | 2003 | 0692 | 84 | \mathbf{A} | 1 | 2003 | 0410 | | U: | 5 20 | 02-8 | 7715 | | 2002 | 0301 | | | |
| | | | | | | | | | | U: | 3 20 | 01-2 | 7312 | 4PP | 2001 | 0302 | | | |

OS MARPAT 137:232680

AB Aryl- and heteroaryl substituted urea compds. (W'NHC(:Y')N(R13)Z'; 1) useful in the treatment of diseases and conditions related to DNA damage or lesions in DNA replication are disclosed. In 1, W' is a six-membered arom. ring contg. at least 2 nitrogen atoms (e.g. pyrazinyl, pyrimidinyl, pyridazinyl, 1,2,4-triazinyl, quinoxalinyl) and optionally substituted as defined in the claims, Z' is a five- or six membered arom. or heteroarom. ring as defined in the claims, Y' is O or S. The first claim contains a much more general formula WX1C(:Y)X2Z (e.g. X1 = null, O, S, CH2, NR1; X2 = O, S, NR1) but emphasis is on 1. Methods of making the compds., and their use as therapeutic agents, for example, in treating cancer and other

diseases characterized by defects in DNA replication, chromosome segregation, or cell division also are described. Although the methods of prepn. are not claimed, about 200 example prepns. are included. N-(2-methoxy-5-methylphenyl)-N'-(2-pyrazinyl)urea and N-(4-chloro-2-methoxyphenyl)-N'-(2-pyrazinyl)urea enhanced the killing of various human cells by 5-fluorouracil from 2- to 10-fold; in HeLa cells, these same compds. enhanced killing by irradn. 2-3 fold.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 18 fbib hitstr abs total

- L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:545668 CAPLUS
- DN 135:137505
- TI Synthesis of disubstituted indazole compounds as cyclin dependent kinase inhibitors and methods for inhibiting cell proliferation
- IN Reich, Siegfried Heinz; Bleckman, Ted Michael; Kephart, Susan Elizabeth; Romines, William Henry, III; Wallace, Michael B.
- PA Agouron Pharmaceuticals, Inc., USA
- SO PCT Int. Appl., 183 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN. CNT 1

| FAN. | | 1
CENT | | | ND
 | DATE | | | A | PPLI | CATI | ON N | 0. | DATE | | | | |
|------|----|---|-------------------|-------------------|-------------------|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|------------------------------|-------------------|-------------------|-------------------|
| PI | | 2001 | | | A | 2 | | | | W | 0 20 | 01-U | s147 | 7 | 2001 | 0118 | | |
| | | W: | CR,
HU,
LU, | CU,
ID,
LV, | CZ,
IL,
MA, | DE,
IN,
MD, | DK,
IS,
MG, | DM,
JP,
MK, | DZ,
KE,
MN, | EE,
KG,
MW, | ES,
KP,
MX, | FI,
KR,
MZ, | GB,
KZ,
NO, | GD,
LC,
NZ, | BZ,
GE,
LK,
PL, | GH,
LR,
PT, | GM,
LS,
RO, | HR,
LT,
RU, |
| | | RW: | ZA,
GH,
DE, | ZW,
GM,
DK, | AM,
KE,
ES, | AZ,
LS,
FI, | BY,
MW,
FR, | KG,
MZ,
GB, | KZ,
SD,
GR, | MD,
SL,
IE, | RU,
SZ,
IT, | TJ,
TZ,
LU, | TM
UG,
MC, | ZW,
NL, | UG, AT, PT, TD, | BE,
SE, | CH, | CY, |
| | EP | BJ, CF,
P 1250326
R: AT, BE,
IE, SI, | | CH, | DE, | DK, | ES, | FR, | E
GB, | P 20
GR, | 01-9
IT, | 4262 | 0 | | 0118 | MC, | PT, | |
| | | IE, SI,
2002161022 | | A1 2 | | 20021031
20030429 | | ŕ | W | 0 20 | 01-บ | S147 | 7 W | 2000
2001
2001 | 0118 | | | |
| | | 2001 | | | | | | | | В | R 20 | 01-7 | 783 | | 2000
2001
2000 | 0118 | | |
| | JP | 2003 | 5202' | 73 | T | 2 | 2003 | 0702 | | J
U | P 20
S 20 | 01-5
00-1 | 5327
7648 | 0
4 P P | 2001
2001
2000
2001 | 0118
0118 | | |
| | EE | EE 200200398 | | | A | | 2003: | 1015 | | E.
U | E 20
S 20 | 02-3
00-1 | 98
7648 | 4PP | 2001
2001
2000
2001 | 0118
0118 | | |

| 099510 | 006.3 | | Page 97 | | | |
|--------|-----------------|----|----------|----|------------------------------|----------------------|
| N | 0 2002002117 | A | 20020916 | | 2002-2117
2000-176484PP | 20020503
20000118 |
| מ | sg 107011 | А | 20030430 | | 2001-US1477 W
2002-107011 | 20010118
20020816 |
| Б | G 10/011 | A | 20030430 | | 2002-107011
2000-176484PP | |
| | | | | WO | 2001-US1477 W | 20010118 |
| Ŭ | rs 2003139463 | A1 | 20030724 | US | 2002-291158 | 20021108 |
| | | | | US | 2000-176484PP | 20000118 |
| | | | | US | 2001-761656 A3 | 320010118 |
| | DDDD 105.107505 | | | | | |

OS MARPAT 135:137505

GI

$$\mathbb{R}^2$$
 \mathbb{R}^1
 \mathbb{R}^1

AΒ Title compds. I [R1 = alkyl, aryl, heteroaryl, carbocycle, heterocycle, etc.; R2 = alkyl, aryl, heteroaryl, carbocycle, heterocycle, etc.] were prepd. Examples include over 90 synthetic examples and 8 bioassays. For instance, 5-amino-1H-indazole was converted to 5-chloro-3-iodo-1H-indazole by diazotization/chlorination (NaNO2, HCl, 0.degree.C/CuCl, 60.degree.C) followed by iodination (I2, NaOHaq). Protection as the N-SEM deriv. and sequential Suzuki coupling with (E)-.beta.-styreneboronic acid to the 3 position and phenylboronic acid to the 5-position yielded N-SEM deriv. I (R1 = (E)-.beta.-styrenyl; R2 = Ph). Deprotection with 3M HCl in EtOH at reflux afforded I (R1 = (E)-.beta.-styrenyl; R2 = Ph; II). II had Ki = 1.7 .mu.M for cdk4/cyclin D3 complex and Ki = 6.7 .mu.M for chk1 protein kinase. Selected examples of I were also assayed for cytotoxicity (HCT 116 cell line, 69 examples). The invention is also directed to methods of treating cancer and disease states assocd. with unwanted angiogenesis and/or cellular proliferation, such as diabetic retinopathy, neovascular glaucoma, rheumatoid arthritis, and psoriasis.

=> d 19 fbib hitstr abs total

- L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:923871 CAPLUS
- TI Caffeine and human DNA metabolism: the magic and the mystery
- AU Kaufmann, William K.; Heffernan, Timothy P.; Beaulieu, Lea M.; Doherty, Sharon; Frank, Alexandra R.; Zhou, Yingchun; Bryant, Miriam F.; Zhou, Tong; Luche, Douglas D.; Nikolaishvili-Feinberg, Nana; Simpson, Dennis A.; Cordeiro-Stone, Marila
- CS Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599, USA
- SO Mutation Research (2003), 532(1-2), 85-102 CODEN: MUREAV; ISSN: 0027-5107
- PB Elsevier Science B.V.
- DT Journal
- LA English
- AB The ability of caffeine to reverse cell cycle checkpoint function and enhance genotoxicity after DNA damage was examd. in telomerase-expressing

<12/10/2003>

Patel

human fibroblasts. Caffeine reversed the ATM-dependent S and G2 checkpoint responses to DNA damage induced by ionizing radiation (IR), as well as the ATR- and Chk1-dependent S checkpoint response to UV radiation (UVC). Remarkably, under conditions in which IR-induced G2 delay was reversed by caffeine, IR-induced G1 arrest was not. Incubation in caffeine did not increase the percentage of cells entering the S phase 6-8 h after irradn.; ATM-dependent phosphorylation of p53 and transactivation of p21Cip1/Waf1 post-IR were resistant to caffeine. Caffeine alone induced a concn.- and time-dependent inhibition of DNA synthesis. It inhibited the entry of human fibroblasts into S phase by 70-80% regardless of the presence or absence of wildtype ATM or p53. Caffeine also enhanced the inhibition of cell proliferation induced by UVC in XP variant fibroblasts. This effect was reversed by expression of DNA polymerase .eta., indicating that translesion synthesis of UVC-induced pyrimidine dimers by DNA pol .eta. protects human fibroblasts against UVC genotoxic effects even when other DNA repair functions are compromised by caffeine.

```
1.9
     ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
```

| FAN.CNT 101 PATENT NO. KIND DATE APPLICATION NO. DATE | |
|---|---------|
| PI WO 2003074654 A2 20030912 WO 2003-US5028 20030220 | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, G | CH, CN, |
| CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, G | GE, GH, |
| GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, I | LK, LR, |
| LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, O | OM, PH, |
| PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, S | TT, TZ, |
| UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, I | KZ, MD, |
| RU, TJ, TM | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, I | |
| CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, I | |
| NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, C | GQ, GW, |
| ML, MR, NE, SN, TD, TG | |
| US 2002-358580PP 20020220 | |
| US 2002~363124PP 20020311 | |
| US 2002-386782PP 20020606 | |
| US 2002-406784PP 20020829
US 2002-408378PP 20020905 | |
| US 2002-406376PP 20020903
US 2002-409293PP 20020909 | |
| US 2002-409293PP 20020909
US 2003-440129PP 20030115 | |
| AU 9851819 A1 19980611 AU 1998-51819 19980112 | |
| AU 729657 B2 20010208 | |
| US 1996-623891 A 19960325 | |
| AU 9939188 A1 19990916 AU 1999-39188 19990713 | |

AU 1995-26422 A319950518

^{2003:719584} CAPLUS AN

DN 139:240342

RNA interference mediated inhibition of gene expression using chemically modified short interfering nucleic acid

ΙN Mcswiggen, James; Beigelman, Leonid; Chowrira, Bharat; Pavco, Pamela; Fosnaugh, Kathy; Jamison, Sharon; Usman, Nassim; Thompson, James

PA Sirna Therapeutics, Inc., USA

SO PCT Int. Appl., 593 pp. CODEN: PIXXD2

DΤ Patent

PATENT FAMILY INFORMATION:

| | | FAMILY IN
94:124868 | FORM | : NOITA | | | |
|----|------|------------------------|------|---------|--|---|----|
| | | TENT NO. | | | DATE | APPLICATION NO. DATE | |
| PI | W: A | | | | 19931125 | WO 1993-US4573 19930513 | |
| | | | · | | | GB, GR, IE, IT, LU, MC, NL, PT, SE US 1992-882822 A 19920514 US 1992-882885 A 19920514 US 1992-936110 A 19920826 US 1992-936421 A 19920826 US 1992-936422 A 19920826 US 1992-936531 A 19920826 US 1992-936532 A 19920826 US 1992-987131 A 19921207 US 1993-6122 A 19930119 US 1993-8910 A 19930119 | |
| | US | | | Α | 19970311
19980512
20021210
19931213
19980219 | US 1992-936110 19920826
US 1992-936421 19920826
US 1992-936532 19920826
AU 1993-42489 19930513 | |
| | | | | | | US 1992-882822 A 19920514 US 1992-882885 A 19920514 US 1992-936110 A 19920826 US 1992-936421 A 19920826 US 1992-936422 A 19920826 US 1992-936531 A 19920826 US 1992-936532 A 19920826 US 1992-987131 A 19921207 US 1993-6122 A 19930119 US 1993-8910 A 19930119 WO 1993-US4573 A 19930513 | |
| | | R: AT, | | CH, DE | | GB, GR, IE, IT, LI, LU, MC, NL, PT, US 1992-882822 A 19920514 US 1992-882885 A 19920514 US 1992-936110 A 19920826 US 1992-936421 A 19920826 US 1992-936422 A 19920826 US 1992-936531 A 19920826 US 1992-936532 A 19920826 US 1992-987131 A 19921207 US 1993-6122 A 19930119 US 1993-8910 A 19930119 WO 1993-US4573 W 19930513 | SE |
| | JP | 08502950 | | Т2 | 19960402 | JP 1993-500939 19930513 US 1992-882822 A 19920514 US 1992-882885 A 19920514 US 1992-936110 A 19920826 US 1992-936421 A 19920826 US 1992-936531 A 19920826 US 1992-936532 A 19920826 US 1992-936532 A 19920826 US 1992-987131 A 19921207 US 1993-6122 A 19930119 US 1993-8910 A 19930119 | |

| | | | | | | | 1993-US4573 | | | |
|-----|--------|-------------------|----------|-----------|-----|------|----------------------------|-------------|-----|----|
| | US | 5989906 | A | 19991123 | | | 1994-192942 | | | |
| | | 65.44855 | | 00000400 | | | 1992-882885 | | | |
| | US | 6544755 | B1 | 20030408 | | | 1994-192943 | 19940207 | | |
| | | 5600655 | ~ | 10070619 | | | 1992-936422 | | | |
| | US | 5639655 | А | 19970617 | | | 1994-233030 | 19940425 | | |
| | | 5500504 | - | 10070004 | | | 1993-8910 | B119930119 | | |
| | US | 5599704 | Α | 19970204 | | | 1995-435350 | 19950505 | | |
| | | 5015506 | | 10001006 | | | 1992-936531 | | | |
| | US | 5817796 | A | 19981006 | | | 1995~435628 | 19950505 | | |
| | | | | | | | 1992-936422 | | | |
| | | | | | | | 1992-987132 | | | |
| | | | | | | | 1994-192943 | | | |
| | | | | | | | 1994-245466 | | | |
| | | 5001150 | 2 | 10000001 | | | 1995-373124 | | | |
| | US | 5801158 | A | 19980901 | | | 1996-777918 | 19961223 | | |
| | | 0051010 | 70.7 | 10000611 | | | 1992-936110 | | | |
| | | 9851819 | A1 | 19980611 | | AU | 1998-51819 | 19980112 | | |
| | AU | 729657 | B2 | 20010208 | | 77.0 | 1006 600001 | 7 10060225 | | |
| | 71 1 1 | 0067005 | 7.1 | 19980827 | | | 1996-623891
1998-67085 | 19980519 | | |
| | | 9867085
730506 | A1
B2 | 20010308 | | AU | 1990-01003 | 19900319 | | |
| | ΑU | 730306 | DZ | 20010306 | | 110 | 1992-882822 | 7 1002051/ | | |
| | | | | | | | 1992-882885 | | | |
| | | | | | | | 1992-936110 | | | |
| | | | | | | | 1992-936421 | | | |
| | | | | | | | 1992-936422 | | | |
| | | | | | | | 1992-936531 | | | |
| | | | | | | | 1992-936532 | | | |
| | | | | | | | 1992-987131 | | | |
| | | | | | | | 1993-6122 | A 19930119 | | |
| | | | | | | | 1993-8910 | A 19930119 | | |
| | ווג | 9939188 | A1 | 19990916 | | | 1999-39188 | 19990713 | | |
| | 110 | 3303200 | *** | 10000010 | | | 1995-26422 | A319950518 | | |
| | US | 2003162264 | A1 | 20030828 | | | 2002-325403 | 20021223 | | |
| | 0.0 | | | 20001121 | | | 1992-936422 | | | |
| | | | | | | | 1994-192943 | | | |
| | US | 2003186923 | A1 | 20031002 | | | 2003-438683 | 20030515 | | |
| | | | | | | US | 1992-882885 | B119920514 | | |
| | | | | | | US | 1994-192942 | A119940207 | | |
| | | | | | | US | 1999-378553 | B119990819 | | |
| FAN | 199 | 94:210049 | | | | | | | | |
| | PA | TENT NO. | KIND | DATE | | API | PLICATION NO | . DATE | | |
| | | | | | | | | | | |
| ΡI | MO | | A1 | 19931125 | | WO | 1993-US4020 | 19930429 | | |
| | | W: AU, CA, | | | | | | | | |
| | | RW: AT, BE, | CH, DE | , DK, ES, | FR, | | GR, IE, IT, I | | PT, | SE |
| | | | | | | | 1992-882689 | | | |
| | | | | | | | 1992-882712 | | | |
| | | | | | | | 1992-882713 | | | |
| | | | | | | | 1992-882714 | | | |
| | | | | | | | 1992-882823 | | | |
| | | | | | | | 1992-882824 | | | |
| | | | | | | | 1992-882886
1992-882888 | | | |
| | | | | | | | 1992-882889 | | | |
| | | | | | | | 1992-882921 | | | |
| | | | | | | US | 1772 002321 | 11 10020014 | | |
| | | | | | | | | | | |

```
US 1992-882922 A 19920514
                                      US 1992-883823 A 19920514
                                      US 1992-883849 A 19920514
                                      US 1992-884073 A 19920514
                                      US 1992-884074 A 19920514
                                      US 1992-884333 A 19920514
                                      US 1992-884422 A 19920514
                                      US 1992-884431 A 19920514
                                      US 1992-884436 A 19920514
                                      US 1992-884521 A 19920514
                                      US 1992-923738 19920731
                                      US 1992-935854
                                                      19920826
                                      US 1992-936086
                                                     19920826
                                      US 1992-948359 19920918
                                      US 1992-963322
                                                      19921015
                                      US 1992-987129
                                                     19921207
                                      US 1992-987130
                                                      19921207
                                      US 1992-987133
                                                      19921207
US 5496698
                  Α
                       19960305
                                      US 1992-987130
                                                      19921207
                                      US 1992-935854 B219920826
AU 9342229
                  A1
                       19931213
                                      AU 1993-42229
                                                       19930429
AU 687736
                  В2
                       19980305
                                      US 1992-882689 A 19920511
                                      US 1992-882712 P 19920514
                                      US 1992-882713 P 19920514
                                      US 1992-882714 P 19920514
                                      US 1992-882823 P 19920514
                                      US 1992-882824 P 19920514
                                      US 1992-882886 Al19920514
                                      US 1992-882922 A 19920514
                                      US 1992-883823 A 19920514
                                      US 1992-883849 A 19920514
                                      US 1992-884073 A 19920514
                                      US 1992-884074 A 19920514
                                      US 1992-884333 A 19920514
                                      US 1992-884422 A 19920514
                                      US 1992-884431 A 19920514
                                      US 1992-884436 A 19920514
                                      US 1992-884521 A 19920514
                                      US 1992-923738 A 19920731
                                      US 1992-935854 A 19920826
                                      US 1992-936086 A 19920826
                                      US 1992-948359
                                                      19920918
                                                      19921015
                                      US 1992-963322
                                                      19921207
                                      US 1992-987129
                                      US 1992-987130
                                                      19921207
                                      US 1992-987133
                                                       19921207
                                      WO 1993-US4020
                                                       19930429
                                      US 1992-882888
                                                       19920514
                                      US 1992-882889
                                                       19920514
                                      US 1992-882921
                                                       19920514
EP 642589
                 A1
                     19950315
                                      EP 1993-910893
                                                       19930429
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                      US 1992-882689 A 19920511
                                      US 1992-882712 A 19920514
                                      US 1992-882713 A 19920514
                                      US 1992-882714 A 19920514
```

```
US 1992-882823 A 19920514
                                      US 1992-882824 A 19920514
                                      US 1992-882886 A 19920514
                                      US 1992-882888 A 19920514
                                      US 1992-882889 A 19920514
                                      US 1992-882921 A 19920514
                                      US 1992-882922 A 19920514
                                      US 1992-883823 A 19920514
                                      US 1992-883849 A 19920514
                                      US 1992-884073 A 19920514
                                      US 1992-884074 A 19920514
                                      US 1992-884333 A 19920514
                                      US 1992-884422 A 19920514
                                      US 1992-884431 A 19920514
                                      US 1992-884436 A 19920514
                                      US 1992-884521 A 19920514
                                      US 1992-923738
                                                      19920731
                                      US 1992-935854
                                                      19920826
                                      US 1992-936086
                                                     19920826
                                      US 1992-948359 19920918
                                      US 1992-963322
                                                     19921015
                                      WO 1993-US4020
                                                     19930429
                                      US 1992-987129
                                                     19921207
                                      US 1992-987130
                                                     19921207
                                      US 1992-987133
                                                       19921207
                       19960123
                                      JP 1993-520255
JP 08500481
                 Т2
                                                       19930429
                                      US 1992-882689 A 19920511
                                      US 1992-882712 A 19920514
                                      US 1992-882713 A 19920514
                                      US 1992~882714 A 19920514
                                      US 1992-882823 A 19920514
                                      US 1992-882824 A 19920514
                                      US 1992-882886 A 19920514
                                      US 1992-882888 A 19920514
                                      US 1992-882889 A 19920514
                                      US 1992-882921 A 19920514
                                      US 1992-882922 A 19920514
                                      US 1992-883823 A 19920514
                                      US 1992-883849 A 19920514
                                      US 1992-884073 A 19920514
                                      US 1992-884074 A 19920514
                                      US 1992-884333 A 19920514
                                      US 1992-884422 A 19920514
                                      US 1992-884431 A 19920514
                                      US 1992-884436 A 19920514
                                      US 1992-884521 A 19920514
                                      US 1992-923738
                                                      19920731
                                      US 1992-935854
                                                       19920826
                                      US 1992-936086
                                                       19920826
                                      US 1992-948359
                                                       19920918
                                      US 1992-963322
                                                       19921015
                                      WO 1993-US4020
                                                       19930429
                                      US 1992-987129
                                                       19921207
                                      US 1992-987130
                                                       19921207
                                      US 1992-987133
                                                       19921207
US 5646020
                 Α
                     19970708
                                      US 1993-166664
                                                       19931210
                                      US 1992-884074 B119920514
```

| 0995100 | 6.3 | | Page 103 | | | |
|---------|-------------------|----------|----------------------|----------------------------|--|--|
| us | 5622854 | A | 19970422 | | 1994-192941
1992-882714 | |
| US | 6258585 | В1 | 20010710 | US | 1994-192946
1992-882713 | 19940207 |
| US | 5525468 | A | 19960611 | US | 1994-284746
1992-883849 | 19940801 |
| US | 5686599 | A | 19971111 | US
US
US | 1995-432876
1992-884436
1993-167586
1994-245736 | 19950502
B219920514
B219931214 |
| | | | | US
US | 1994-345516
1995-380734 | B219941128
A319950130 |
| US | 6469158 | B1 | 20021022 | US
US | 1995-433218
1992-884436
1993-167586
1994-245736 | B219931214 |
| US | 5631360 | A | 19970520 | US | 1994-345516
1995-380734
1995-435232 | |
| | | | | us
us
us | 1992-884436
1993-167586
1994-245736
1994-345516
1995-380734 | B219931214
B219940518
B219941128 |
| US | 5804683 | A | 19980908 | US
US
US | 1995-435113
1992-884436
1993-167586
1994-245736 | 19950505
B119920514
B219931214
B219940518 |
| US | 5795778 | A | 19980818 | US
US
US | 1994-345516
1996-623891
1992-882921
1992-948359
1992-987133 | 19960325
B219920514
B219920918 |
| us | 5972699 | A | 19991026 | US
US
US
US | 1994-238200
1997-835269
1992-882921
1992-948359
1992-987133
1994-238200 | 19970408
B219920514
B219920918
B119921207 |
| បន | 5977343 | A | 19991102 | US
US
US
US
US | 1996-623891
1997-911869
1992-884436
1993-167586
1994-245736
1994-345516 | A119960325
19970815
B119920514
B219931214
B219940518
B219941128 |
| υs | 5831071 | A | 19981103 | US
US
US
US
US | 1995-432876
1997-919568
1992-884436
1993-167586
1994-245736
1994-345516
1995-380734
1995-434559 | 19970829
B119920514
B219931214
B219940518
B219941128
B319950130 |
| | 9851819
729657 | A1
B2 | 19980611
20010208 | AU | 1998-51819 | 19980112 |
| us | 6353098 | В1 | 20020305 | | 1996-623891
1998-99083 | A 19960325
19980617 |

| | | | US 1992-884436 B119920514
US 1993-167586 B219931214
US 1994-245736 B219940518 |
|-----|-----------------------------|----------------------|---|
| | | | US 1994-345516 B219941128 |
| | | | US 1995-380734 B319950130 |
| | | | US 1995-434559 B119950502 |
| | | | US 1997-919568 A119970829 |
| | US 6432704 | B1 20020 | |
| | | | US 1992-882921 B219920514 |
| | | | US 1992-948359 B219920918
US 1992-987133 B119921207 |
| | | | US 1994-238200 B119940504 |
| | | | US 1996-623891 A119960325 |
| | | | US 1997-835269 A119970408 |
| | AU 9939188 | A1 19990 | |
| | 1.0 0000200 | 1.1 13000 | AU 1995-26422 A319950518 |
| | US 6437117 | B1 20020 | |
| | | | US 1992-884436 B119920514 |
| | | | US 1993-167586 B219931214 |
| | | | US 1994-245736 B219940518 |
| | | | US 1994-345516 B219941128 |
| | | | US 1995-380734 B319950130 |
| | | | US 1995-432876 A119950502 |
| | *** | D1 00000 | US 1997-911869 Al19970815 |
| | US 6440719 | B1 20020 | |
| | | | US 1992-882921 B219920514
US 1992-948359 B219920918 |
| | | | US 1992-987133 B119921207 |
| | | | US 1994-238200 B119940504 |
| | | | US 1996-623891 A119960325 |
| | | | US 1997-835269 A119970408 |
| | | | US 1999-340861 A119990628 |
| | US 2003166917
US 6649751 | A1 20030
B2 20031 | 118 |
| | | | US 1992-884436 B119920514 |
| | | | US 1993-167586 B219931214 |
| | | | US 1994-245736 B219940518
US 1994-345516 B219941128 |
| | | | US 1994-343316 B219941126
US 1995-380734 B319950130 |
| | | | US 1995-432876 A119950502 |
| | | | US 1997-911869 A119970815 |
| | | | US 1999-363238 A119990727 |
| | US 2003088087 | A1 20030 | |
| | | | US 1992-884436 B119920514 |
| | | | US 1993-167586 B219931214 |
| | | | US 1994-245736 B219940518 |
| | | | US 1994-345516 B219941128 |
| | | | US 1995-380734 B319950130 |
| | 2224 25554 | | US 1995-433218 A119950502 |
| FAN | 1994:261342
PATENT NO. | KIND DATE | APPLICATION NO. DATE |
| PI | - | A1 19940 | 203 WO 1993-US6316 19930702 |
| | W: AU, CA, | | |
| | RW: AT, BE, | CH, DE, DK, | ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |
| | | | US 1992~916763 A 19920717 |
| | | | US 1992-987132 A 19921207 |

Patel <12/10/2003>

| AU S | 9347698 | A1 | 19940214 | | US 1992-989848 A 19921207
US 1992-989849 A 19921207
US 1993-8895 A 19930119
AU 1993-47698 19930702
US 1992-916763 A 19920717
US 1992-987132 A 19921207
US 1992-989848 A 19921207
US 1992-989849 A 19921207 |
|--------------|----------------------------------|---------------------|-----------------------------------|-----|--|
| EP € | 554077
R: AT, BE, | | | FR, | US 1992-989849 A 19921207 US 1993-8895 A 19930119 WO 1993-US6316 W 19930702 EP 1993-918144 19930702 GB, GR, IE, IT, LI, LU, MC, NL, PT, SE US 1992-916763 A 19920717 US 1992-987132 A 19921207 US 1992-989848 A 19921207 US 1992-989849 A 19921207 |
| JP (| 07509133 | Т2 | 19951012 | | US 1993-8895 A 19930119 WO 1993-US6316 W 19930702 JP 1993-504490 19930702 US 1992-916763 A 19920717 US 1992-987132 A 19921207 US 1992-989848 A 19921207 US 1992-989849 A 19921207 US 1993-8895 A 19930119 |
| EP 7 | 786522
786522
R: AT, CH, | A2
A3
DE, ES, | 19970730
19970827
, FR, GB, | IT, | US 1992-916763 A 19920717
US 1992-987132 A 19921207
US 1992-989848 A 19921207
US 1992-989849 A 19921207 |
| EP 1
EP 1 | 1251170
1251170
R: AT, BE, | A2
A3
CH, DE, | 20021023
20021030
, DK, ES, | FR, | US 1993-8895 A 19930119
EP 1993-918144 A319930702
EP 2002-5642 19930702
GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
US 1992-916763 A 19920717
US 1992-987132 A 19921207
US 1992-989848 A 19921207 |
| us 5 | 5817796 | A | 19981006 | | US 1992-989849 A 19921207
US 1993-8895 A 19930119
EP 1993-918144 A319930702
US 1995-435628 19950505
US 1992-936422 B119920826
US 1992-987132 B219921207
US 1994-192943 A219940207
US 1994-245466 B219940518 |
| AU 7 | 9851819
729657
9852096 | A1
B2
A1 | 19980611
20010208
19980319 | | US 1995-373124 A319950113
AU 1998-51819 19980112
US 1996-623891 A 19960325
AU 1998-52096 19980116
US 1992-916763 A 19920717
US 1992-987132 A 19921207
US 1992-989848 A 19921207
US 1992-989849 A 19921207 |

09951006.3

| | | | | | 3 | | | |
|-----|--------------|------------|------|-------------|-----------|-----|--|-----|
| | | | | | | | US 1993-8895 A 19930119 | |
| | AU 9 | 939188 | | A1 | 19990916 | | AU 1999-39188 19990713 | |
| | | | | | | | AU 1995-26422 A319950518 | |
| | US 20 | 00300346 | 59 | A1 | 20030102 | | US 2002-56414 20020123 | |
| | | | | | | | US 1992-987132 B219921207 | |
| | | | | | | | WO 1993-US6316 W 19930702 | |
| | | | | | | | US 1994-245466 B219940518 | |
| | | | | | | | US 1994-291932 A119940815 | |
| | | | | | | | US 1996-777916 All9961223 | |
| FAN | | :708429 | | | | | | |
| | PATE | ON TN | | KIND | DATE | | APPLICATION NO. DATE | |
| ΡI | WO 9! | 504818 | | A1 | 19950216 | | WO 1994-US8613 19940804 | |
| | | W: AU, | | | | | | |
| | | | | | DK, ES, | FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE | |
| | | | | | | | US 1993-103423 A 19930806 | |
| | AU 94 | 473755 | | A1 | 19950228 | | AU 1994-73755 19940801 | |
| | | | | | | | US 1993-103423 A 19930806 | |
| | | | | | | | WO 1994-US8613 W 19940804 | |
| | CA 2 | 168566 | | AA | 19950216 | | CA 1994-2168566 19940804 | |
| | | | | | | | US 1993-103423 A 19930806 | |
| | | | | | | | WO 1994-US8613 W 19940804 | |
| | | | | | | | EP 1994-922766 19940804 | |
| | 3 | R: AT, | BE, | CH, DE, | , DK, ES, | FR, | GB, GR, IE, IT, LI, LU, MC, NL, PT, S | E |
| | | | | | | | US 1993-103423 A 19930806 | |
| | | | | | | | US 1994-271880 A 19940707 | |
| | TD 04 | 0501010 | | mo. | 10070010 | | WO 1994-US8613 W 19940804 | |
| | JP 05 | 9201318 | | TZ | 19970210 | | | |
| | | | | | | | US 1993-103423 A 19930806 | |
| | | | | | | | US 1994-271880 A 19940707
WO 1994-US8613 W 19940804 | |
| | 7111 (2) | 051010 | | 7 .1 | 19980611 | | | |
| | | 29657 | | | 20010208 | | A0 1990 31019 19900112 | |
| | AU /2 | 2,7031 | | DZ | 20010200 | | US 1996-623891 A 19960325 | |
| | AU 99 | 939188 | | A 1 | 19990916 | | AU 1999-39188 19990713 | |
| | | | | | | | AU 1995-26422 A319950518 | |
| FAN | 1995 | :733249 | | | | | | |
| | PATE | NT NO. | | KIND | DATE | | APPLICATION NO. DATE | |
| PI | WO 95 |
506731 | | | 19950309 | | WO 1994-US9342 19940819 | |
| | | | | | 19950706 | | | |
| | _ | | CA, | JP, KR | | | | |
| | I | | | | DK, ES, | FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE | |
| | | | | | | | US 1993-116177 A 19930902 | |
| | | | | | | | US 1993-152481 A 19931112 | |
| | | | | | | | US 1994-233748 A 19940419 | |
| | CA 2 | 169645 | | AA | 19950309 | | CA 1994-2169645 19940819 | |
| | | | | | | | US 1993-116177 A 19930902 | |
| | | | | | | | US 1993-152481 A 19931112 | |
| | | | | | | | US 1994-233748 A 19940419 | |
| | AU 95 | 514571 | | A1 | 19950322 | | AU 1995-14571 19940819 | |
| | | | | | | | US 1993-116177 A 19930902 | |
| | | 4000 | | | 10061010 | | WO 1994-US9342 W 19940819 | |
| | | 48382 | | A1 | 19961218 | | EP 1994~925939 19940819 | |
| | | 48382 | D.C. | B1 | 20021106 | מש | CD CD TD TM IT THE MC NI DM C | ינו |
| | 1 | R: AT, | DE, | CH, DE, | , Dr, ES, | cK, | GB, GR, IE, IT, LI, LU, MC, NL, PT, S | Ľ |
| | | | | | | | US 1993-116177 A 19930902 | |

| | JP | 09502092 | | Т2 | 19970304 | | US
WO
JP
US
US | 1993-1
1994-2
1994-0
1994-5
1993-1
1993-1 | 233748
JS9342
508146
16177
.52481 | A 199
W 199
199
A 199
A 199 | 40419
40819
40819
30902
31112 | | | |
|-----------|--------------------------------|---|------------|---|--|-----|---|---|--|---|--|------|-----|-------|
| | EP | | | | 20021030
, DK, ES, | | EP | 1994-U
2002-9 | 782 | 199 | 40819 | | Dm | T 172 |
| | | R. AI, | DE, | CH, DE | , рк, вз, | fK, | US
US
US | 1993-1
1993-1
1994-2
1994-9 | .16177
.52481
.33748 | A 199
A 199
A 199 | 30902
31112
40419 | MC, | PI, | TE |
| | ΑT | 227342 | | E | 20021115 | | US
US
US | 1994-9
1993-1
1993-1
1994-2
1994-U | .16177
.52481
:33748 | A 1993
A 1993
A 1994 | 30902
31112
40419 | | | |
| | ES | 2186690 | | Т3 | 20030516 | | ES
US
US | 1994-9
1993-1
1993-1
1994-2 | 25939
.16177
.52481 | 1994
A 1993
A 1993 | 40819
30902
31112 | | | |
| | UA
UA | 9851819
729657 | | A1
B2 | 19980611
20010208 | | UA | 1998-5 | 1819 | 1998 | 30112 | | | |
| | | 9881856
730934 | | A1
B2 | 19981015
20010322 | | | 1996-6
1998-8 | | | | | | |
| | AU | 9939188 | | A1 | 19990916 | | | 1993-1
1999-3 | | | | | | |
| | | | | 111 | 19990910 | | | | | | | | | |
| FAN | | 95:742995 | | | | | AU | 1995-2 | 6422 | A3199 | 50518 | | | |
| FAN | | | | KIND | DATE | | AU | | 6422 | A3199 | 50518 | | | |
| FAN
PI | PAT | 95:742995
PENT NO.
9513378
W: AU, |
CA, | KIND

Al
JP, KR | DATE

19950518 | | AU
API

WO | 1995-2
PLICATI

1994-U | 6422
ON NO.

\$12806 | DATI
DATI
1994 | 50518
E

11107 | יחכו | Q F | |
| | PAT | 95:742995
PENT NO.
9513378
W: AU, |
CA, | KIND

Al
JP, KR | DATE | | AU API WO GB, G | 1995-2
PLICATI

1994-U | 6422
ON NO.

\$12806
IT, I | DATI 1994 | E

11107 | PT, | SE | |
| | PAT
WO | 95:742995
TENT NO.
9513378
W: AU,
RW: AT, | CA,
BE, | KIND A1 JP, KR CH, DE, | DATE

19950518 | FR, | AU API WO GB, G US CA | 1995-2
PLICATI

1994-U
GR, IE,
1993-1
1994-2 | ON NO.

S12806
IT, I
49210
176035 | DATI
DATI
1994
JU, MC,
A 1993 | E | PT, | SE | |
| | PAT
WO | 95:742995
TENT NO.
9513378
W: AU,
RW: AT, | CA,
BE, | KIND A1 JP, KR CH, DE, | DATE
19950518 | FR, | AU APE WO GB, G US CA US | 1995-2
PLICATI

1994-U
GR, IE,
1993-1 | ON NO.

\$12806
IT, I
49210
176035
49210 | DATI
1994
5 1994
5 1993
A 1993
A 1993 | E | PT, | SE | |
| | PAT
WO
CA | 95:742995
TENT NO.
9513378
W: AU,
RW: AT, | CA,
BE, | KIND A1 JP, KR CH, DE, | DATE 19950518 DK, ES, 19950518 | FR, | AU APH WO GB, G US CA US AU | 1995-2
PLICATI

1994-U
GR, IE,
1993-1
1994-2
1993-1
1995-1 | ON NO.

S12806
IT, I
49210
176035
49210
0904 | DATI
1994
5 1994
A 1993
A 1994
A 1994 | 50518
E

11107
. NL,
31108
11107
31108
11107 | PT, | SE | |
| | PAT
WO
CA | 95:742995
TENT NO.
9513378
W: AU,
RW: AT,
2176035 | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 | DATE 19950518 DK, ES, 19950518 | FR, | AU APH WO GB, G US CA US AU | 1995-2
PLICATI

1994-U
GR, IE,
1993-1
1994-2
1993-1
1995-1 | ON NO.

S12806
IT, I
49210
176035
49210
0904
49210 | DATI
1994
JU, MC,
A 1993
A 1994
A 1994
A 1994 | 50518
E

11107
. NL,
31108
11107
31108
11107 | PT, | SE | |
| | PAT
WO
CA
AU
AU | 95:742995
TENT NO.
9513378
W: AU,
RW: AT,
2176035
9510904
687479 | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 B2 | DATE 19950518 DK, ES, 19950518 | FR, | AU APH WO GB, G US CA US AU US WO | 1995-2
PLICATI

1994-U
GR, IE,
1993-1
1994-2
1993-1
1995-1 | ON NO S12806 IT, I 49210 176035 49210 0904 49210 S12806 | DATI
1994
JU, MC,
A 1993
1994
A 1993
A 1994
A 1993
W 1994 | 50518
E

11107
. NL,
31108
11107
31108
11107 | PT, | SE | |
| | PAT
WO
CA
AU
AU | 95:742995
TENT NO.
9513378
W: AU,
RW: AT,
2176035
9510904
687479 | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 B2 | DATE 19950518 DK, ES, 19950518 19950529 19980226 | FR, | AU APH WO GB, G US CA US AU US WO EP GB, G | 1995-2
PLICATI

1994-U
GR, IE,
1993-1
1993-1
1995-1
1993-1
1994-U
1995-9
GR, IE, | ON NO S12806 IT, I 49210 176035 49210 0904 49210 S12806 01804 IT, L | DATE 1994 JU, MC, A 1993 1994 A 1993 IW 1994 1994 I, LU, | 50518
E | | | SE |
| | PAT
WO
CA
AU
AU | 95:742995
TENT NO.
9513378
W: AU,
RW: AT,
2176035
9510904
687479 | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 B2 | DATE 19950518 DK, ES, 19950518 19950529 19980226 | FR, | AU APH WO GB, G US CA US AU US WO EP GB, G | 1995-2
PLICATI

1994-U
GR, IE,
1993-1
1993-1
1995-1
1995-9
GR, IE,
1993-1 | ON NO S12806 IT, I 49210 176035 49210 0904 49210 S12806 01804 IT, L 49210 | DATH 1994 JU, MC, A 1993 1994 A 1993 A 1994 A 1994 A 1994 A 1994 A 1994 A 1994 | 50518
E

11107
NL,
31108
11107
31108
11107
MC,
31108 | | | SE |
| | PAT-WO | 95:742995
TENT NO.
9513378
W: AU,
RW: AT,
2176035
9510904
687479 | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 B2 | DATE 19950518 DK, ES, 19950518 19950529 19980226 | FR, | AU API WO GB, G US CA US WO EP GB, G US WO JP US | 1995-2
PLICATI

1994-U
GR, IE,
1993-1
1993-1
1995-1
1995-9
GR, IE,
1993-1
1994-U
1994-U
1994-U
1994-U | ON NO S12806 IT, I 49210 176035 49210 0904 49210 S12806 01804 IT, L 49210 S12806 13927 49210 | DATI 1994 JU, MC, A 1993 1994 A 1993 A 1994 A 1994 JI, LU, A 1993 W 1994 A 1993 A 1993 | 50518 E 11107 NL, 31108 11107 31108 11107 11107 MC, 31108 11107 | | | SE |
| | PATE WOO CA AU AU EP | 95:742995
EENT NO.
9513378
W: AU,
RW: AT,
2176035
9510904
687479
728204
R: AT, | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 B2 A1 CH, DE, | DATE 19950518 DK, ES, 19950518 19950529 19980226 19960828 DK, ES, | FR, | AU APP WO GB, G US CA US WO EP GB, G US WO JP US WO | 1995-2
PLICATI

1994-U
GR, IE,
1993-1
1993-1
1995-1
1995-9
GR, IE,
1993-1
1994-U
1994-U
1994-U | ON NO S12806 IT, I 49210 176035 49210 0904 49210 S12806 01804 IT, L 49210 S12806 13927 49210 S12806 | DATI 1994 JU, MC, A 1993 A 1993 A 1994 | 50518 E 11107 NL, 31108 11107 31108 11107 11107 MC, 31108 11107 | | | SE |
| | PATE WOO CA AU AU EP JP | 95:742995 EENT NO. 9513378 W: AU, RW: AT, 2176035 9510904 687479 728204 R: AT, | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 B2 A1 CH, DE, | DATE 19950518 DK, ES, 19950518 19950529 19980226 19960828 DK, ES, 19970513 | FR, | AU API WO GB, G US AU US WO EP GB, G US WO JP US WO AU | 1995-2 PLICATI 1994-U GR, IE, 1993-1 1993-1 1995-9 GR, IE, 1993-1 1994-U 1994-U 1994-U 1994-S 1994-U 1994-S 1994-U 1994-S | ON NO S12806 IT, I 49210 176035 49210 0904 49210 S12806 01804 IT, L 49210 S12806 13927 49210 S12806 1819 | DATE 1994 JU, MC, A 1993 A 1993 A 1993 A 1994 A 1994 A 1994 A 1995 W 1994 A 1995 W 1994 A 1995 | 50518 E 11107 NL, 31108 11107 31108 11107 81107 11107 81108 11107 81108 | | | SE |
| | PAT WO CA AU AU EP JP AU AU AU | 95:742995 PENT NO. 9513378 W: AU, RW: AT, 2176035 9510904 687479 728204 R: AT, 09504701 | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 B2 A1 CH, DE, T2 A1 B2 | DATE 19950518 DK, ES, 19950518 19950529 19980226 19960828 DK, ES, 19970513 19980611 20010208 | FR, | AU API WO GB, G US AU US WO EP GB, G US WO JP US WO AU US | 1995-2 PLICATI 1994-U GR, IE, 1993-1 1994-2 1993-1 1995-9 GR, IE, 1994-U 1995-9 1994-U 1994-5 1994-U 1994-5 1994-U 1998-5 | ON NO S12806 IT, I 49210 176035 49210 0904 49210 S12806 01804 IT, L 49210 S12806 13927 49210 S12806 1819 | DATE 1994 A 1993 A 1994 A 1995 A 1996 A 1996 A 1996 A 1996 | 50518 E | | | SE |
| | PAT WO CA AU AU EP AU AU AU AU | 95:742995 EENT NO. 9513378 W: AU, RW: AT, 2176035 9510904 687479 728204 R: AT, 09504701 | CA,
BE, | KIND A1 JP, KR CH, DE, AA A1 B2 A1 CH, DE, T2 A1 B2 A1 | DATE 19950518 DK, ES, 19950518 19950529 19980226 19960828 DK, ES, 19970513 | FR, | AU API WO GB, G US AU US WO EP GB, G US WO JP US WO AU US | 1995-2 PLICATI 1994-U GR, IE, 1993-1 1993-1 1995-9 GR, IE, 1993-1 1994-U 1994-U 1994-U 1994-S 1994-U 1994-S 1994-U 1994-S | ON NO S12806 IT, I 49210 176035 49210 0904 49210 S12806 01804 IT, L 49210 S12806 13927 49210 S12806 1819 | DATE 1994 A 1993 A 1994 A 1995 A 1996 A 1996 A 1996 A 1996 | 50518 E 11107 NL, 31108 11107 31108 11107 81107 11107 81108 11107 81108 | | | SE |

09951006.3 Page 108

| | AU 9939188 | A1 | 19990916 | | AU 1999-39188 19990713
AU 1995-26422 A319950518 |
|-----|--|----------|----------------------|-----|---|
| FAN | 1995:808121
PATENT NO. | KIND | DATE | | APPLICATION NO. DATE |
| PI | WO 9519429
WO 9519429
W: AU, CA, | A2
A3 | 19950720
19950908 | | WO 1995-US495 19950112 |
| | RW: AT, BE, | CH, DE | , DK, ES, | FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE
US 1994-182968 A 19940113 |
| | US 5610054 | A | 19970311 | | 115 1004-192069 10040112 |
| | AU 9515665 | A1 | 19950801 | | US 1994-182988 B219920514 AU 1995-15665 19950112 US 1994-182968 A 19940113 WO 1995-US495 W 19950112 |
| | EP 737247 | A1 | 19961016 | | EP 1995-907430 19950112 |
| | | | | | GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
US 1994-182968 A 19940113
WO 1995-US495 W 19950112 |
| | | | | | JP 1995-519142 19950112
US 1994-182968 A 19940113
WO 1995-US495 W 19950112 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | | |
| | AU 9939188 | A1 | 19990916 | | US 1996-623891 A 19960325
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| FAN | 1995:833137
PATENT NO. | KIND | DATE | | APPLICATION NO. DATE |
| PI | WO 9513380
WO 9513380
W: AU, CA, | A2
A3 | 19950518
19950622 | | WO 1994-US13129 19941110 |
| | | | | FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE
US 1993-152487 A 19931112 |
| | AU 9510973
AU 704687 | A1
B2 | 19950529
19990429 | | AU 1995-10973 19941110 |
| | | | | | US 1993-152487 A 19931112
WO 1994-US13129W 19941110 |
| | EP 728205 | A1 | 19960828 | | WO 1994-US13129W 19941110
EP 1995-901907 19941110 |
| | | | | | GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
US 1993-152487 A 19931112
WO 1994-US13129W 19941110 |
| | JP 09504949 | Т2 | 19970520 | | JP 1995-514069 19941110
US 1993-152487 A 19931112
WO 1994-US13129W 19941110 |
| | AT 226254 | E | 20021115 | | AT 1995-901907 19941110
US 1993-152487 A 19931112
WO 1994-US13129W 19941110 |
| | AU 9851819 | A1 | 19980611 | | AU 1998-51819 19980112 |
| | AU 729657 | B2 | 20010208 | | us 1996-623891 A 19960325 |
| | AU 9939188 | A1 | 19990916 | | AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| FAN | 1995:872057
PATENT NO. | KIND | DATE | | APPLICATION NO. DATE |

| ΡI | | | | | | | | | | | | | 19941024 | | | |
|------|---------------|--------|--------|-----|-----|---------|------|------|-----|-------|----------|--------|------------|------|-----|----|
| E.T. | wo | 20TT | 2.T.O. | ~7 | A. | עע
ד | 1990 | 0304 | | WO | 1994-09 | 17104 | 19941024 | | | |
| | | | | | JP, | | D.17 | ПО | | an . | an 75 | Tm T1 | | D.M. | ~= | |
| | | RW: | AT, | BE, | CH, | DE, | DK, | ES, | EK, | | | | J, MC, NL, | PT, | SE | |
| | | 0154 | | | | _ | | | | | | | 19931027 | | | |
| | CA | 2174 | 339 | | ΑA | 4. | 1995 | 0504 | | | | | 19941024 | | | |
| | | | | | | | | | | | | | 19931027 | | | |
| | AU | 9480 | 886 | | A. | 1. | 1995 | 0522 | | | | | 19941024 | | | |
| | | | | | | | | | | | | | 19931027 | | | |
| | | | | | | | | | | | | | 1 19941024 | | | |
| | \mathbf{EP} | 7257 | 88 | | A. | 1 | 1996 | 0814 | | EP | 1994-93 | 2003 | 19941024 | | | |
| | EP | 7257 | 88 | | B | 1 | 1998 | 1216 | | | | | | | | |
| | | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, G | GR, IE, | IT, LI | LU, MC, | NL, | PT, | SE |
| | | | | | | | | | | US | 1993-14 | 3832 A | 19931027 | | | |
| | | | | | | | | | | WO | 1994-US | 12164W | 19941024 | | | |
| | JP | 0950 | 4297 | | T2 | 2 | 1997 | 0428 | | JP | 1994-51 | .2756 | 19941024 | | | |
| | | | | | | | | | | | | | 19931027 | | | |
| | | | | | | | | | | WO | 1994-US | 12164W | 19941024 | | | |
| | ΑT | 1746 | 00 | | E | | 1999 | 0115 | | | | | 19941024 | | | |
| | | | | | | | | | | | 1993-14 | 3832 A | 19931027 | | | |
| | ES | 2127 | 948 | | T3 | 3 | 1999 | 0501 | | | | | 19941024 | | | |
| | | | | | - ` | _ | | | | US | | | 19931027 | | | |
| | ΑIJ | 9851 | 819 | | A. | 1 | 1998 | 0611 | | | | | 19980112 | | | |
| | | 7296 | | | | | 2001 | | | | | | | | | |
| | | , 2, 3 | ~ . | | | • | | | | IIS | 1996-62 | 3891 A | 19960325 | | | |
| | ΔII | 9939 | 188 | | A. | 1 | 1999 | 0916 | | | | | 19990713 | | | |
| | | • | | | | _ | | | | | | | 319950518 | | | |
| FAN | 199 | 95:90 | 9574 | | | | | | | | | | | | | |
| | | CENT : | | | KTN | ďΓ | DATE | | | API | PLICATIO | N NO. | DATE | | | |
| | | | | | | | | | | | | | | | | |
| PI | WO | 9523 | 225 | | A2 | 2 | 1995 | 0831 | | WO | 1995-IB | 156 | 19950223 | | | |
| | WO | 9523 | 225 | | A3 | 3 | 1996 | | | | | | | | | |
| | | | | | JP, | | | | | | | | | | | |
| | | | | | | | | ES. | FR. | GB, C | GR. IE. | IT, LU | , MC, NL, | PT, | SE | |
| | | | • | • | · | • | • | • | - | | | | 19940223 | • | | |
| | | | | | | | | | | | | | 19940329 | | | |
| | | | | | | | | | | | | | 19940404 | | | |
| | | | | | | | | | | | | | 19940407 | | | |
| | | | | | | | | | | | | | 19940415 | | | |
| | | | | | | | | | | | | | 19940415 | | | |
| | | | | | | | | | | | | | 19940518 | | | |
| | | | | | | | | | | | | | 19940706 | | | |
| | | | | | | | | | | | | | 19940815 | | | |
| | | | | | | | | | | | | | 19940816 | | | |
| | | | | | | | | | | | | | 19940817 | | | |
| | | | | | | | | | | | | | 19940819 | | | |
| | | | | | | | | | | | | | 19940902 | | | |
| | | | | | | | | | | | | | 19940902 | | | |
| | | | | | | | | | | | | - | 19940908 | | | |
| | | | | | | | | | | | | | 19940923 | | | |
| | | | | | | | | | | | | | 19940923 | | | |
| | | | | | | | | | | | | | 19940928 | | | |
| | | | | | | | | | | | | | 19941003 | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | 19941011 | | | |
| | | | | | | | | | | | 1994-33 | | 19941104 | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | 1994~33 | | 19941110 | | | |
| | | | | | | | | | | | 1994-33 | | 19941110 | | | |

```
US 1994-357577
                                                      19941216
                                      US 1994-363233
                                                      19941223
                                      US 1995-380734 19950130
                                                     19940329
US 5639647
                 A 19970617
                                     US 1994-218934
US 5658780
                 Α
                      19970819
                                     US 1994-291932 19940815
                                     US 1992-987132 B219921207
                                     US 1994-245466 B219940518
US 5837542
                 Α
                      19981117
                                     US 1994-292620
                                                    19940817
                                     US 1992-989849 B219921207
                                     US 1993-8895 B219930119
US 5811300
                 Α
                    19980922
                                     US 1994-311486 19940923
                                     US 1992-989849 B219921207
                                     US 1993-8895 B219930119
                    19970401
US 5616488
                 Α
                                     US 1994-319492 19941007
                                     US 1992-989849 B219921207
                                     US 1993-8895 B219930119
                    19970520
19971202
19990511
US 5631359
                 Α
                                     US 1994-321993 19941011
US 5693532
                 Α
                                     US 1994-334847
                                                    19941104
US 5902880
                 Α
                                     US 1994-337608
                                                     19941110
                                     US 1994-293520 B219940819
                    19980721
US 5783425
                A
                                     US 1994-357577
                                                     19941216
                                     US 1993-143832 B219931027
                A 19980203
US 5714383
                                     US 1994-363233
                                                     19941223
                                     US 1992-882822 Al19920514
                                     US 1994-193922 B219940207
AU 9518214
                A1 19950601
                                     AU 1995-18214
                                                      19950223
AU 706417
                 B2 19980617
                                     US 1994-201109 A 19940223
                                     US 1994-218934 A 19940329
                                     US 1994-222795 A 19940404
                                     US 1994-224483 A 19940407
                                     US 1994-227958 A 19940415
                                     US 1994-228041 A 19940415
                                     US 1994-245736 A 19940518
                                     US 1994-271280 A 19940706
                                     US 1994-291932 A 19940815
                                     US 1994-291433 A 19940816
                                     WO 1995-IB156 W 19950223
                                     EP 1995-909920 19950223
EP 746614
                 A1
                      19961211
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                     WO 1995-IB156 W 19950223
                                     US 1994-201109 A 19940223
                                     US 1994-218934 A 19940329
                                     US 1994-222795 A 19940404
                                     US 1994-224483 A 19940407
                                     US 1994-228041 A 19940415
                                     US 1994-227958 A 19940415
                                     US 1994-245736 A 19940518
                                     US 1994-271280 A 19940706
                                     US 1994-291932 A 19940815
                                     US 1994-291433 A 19940816
                                     US 1994-292620 A 19940817
                                     US 1994-293520 A 19940819
                                     US 1994-300000 A 19940902
                                     US 1994-303039 A 19940908
                                     US 1994-311486 A 19940923
                                     US 1994-311749 A 19940923
```

| 09951006.3 | Page 111 |
|------------|----------|
|------------|----------|

| | | | US 1994-314397 A 19940928
US 1994-316771 A 19941003
US 1994-319492 A 19941007
US 1994-321993 19941011
US 1994-334847 19941104
US 1994-337608 19941110
US 1994-345516 19941128
US 1994-357577 19941216
US 1994-363233 19941223
US 1995-380734 19950130 |
|-------------|----|----------|---|
| JP 09509323 | Т2 | 19970922 | JP 1995-522236 19950223 WO 1995-IB156 W 19950223 US 1994-201109 A 19940223 US 1994-218934 A 19940329 US 1994-22795 A 19940404 US 1994-22795 A 19940415 US 1994-228041 A 19940415 US 1994-245736 A 19940518 US 1994-271280 A 19940706 US 1994-291932 A 19940815 US 1994-291433 A 19940816 US 1994-292620 A 19940817 US 1994-293520 A 19940817 US 1994-33520 A 19940902 US 1994-311486 A 19940923 US 1994-311486 A 19940923 US 1994-314397 A 19940923 US 1994-316771 A 19941003 US 1994-316771 A 19941003 US 1994-334847 A 19941011 US 1994-337608 19941110 US 1994-337608 19941110 US 1994-357577 19941216 US 1994-363233 19941223 US 1994-363233 19941223 US 1994-363233 19941223 |
| US 5686599 | A | 19971111 | US 1995-432876 19950502
US 1992-884436 B219920514
US 1993-167586 B219931214
US 1994-245736 B219940518
US 1994-345516 B219941128
US 1995-380734 A319950130 |
| US 6469158 | B1 | 20021022 | US 1995-433218 19950502
US 1992-884436 B119920514
US 1993-167586 B219931214
US 1994-245736 B219940518
US 1994-345516 B219941128 |
| US 5631360 | A | 19970520 | US 1995-380734 B319950130
US 1995-435232 19950505
US 1992-884436 B119920514
US 1993-167586 B219931214
US 1994-245736 B219940518
US 1994-345516 B219941128 |
| US 5804683 | Α | 19980908 | US 1995-380734 A319950130
US 1995-435113 19950505
US 1992-884436 B119920514
US 1993-167586 B219931214 |

| 09951006.3 | Page 112 |
|------------|----------|
|------------|----------|

| | | | | | 1004 045506 | -010010510 |
|-----|------------|------------|----------|----|----------------------------|------------|
| | | | | | 1994-245736 | |
| TIC | 5985621 | A | 19991116 | | 1994-345516
1996-710113 | 19960912 |
| 0.5 | 3903021 | A | 19991110 | | 1994-218934 | |
| IIS | 5837855 | Α | 19981117 | | 1996-773297 | 19961223 |
| 0,5 | 3037033 | А | 19901117 | | 1994-321993 | |
| ΠS | 5977343 | А | 19991102 | | 1997-911869 | 19970815 |
| 0.5 | 3711343 | Д | 19391102 | | 1992-884436 | |
| | | | | | 1993-167586 | |
| | | | | | 1994-245736 | |
| | | | | | 1994-345516 | |
| | | | | | 1995-432876 | |
| US | 5831071 | Α | 19981103 | | 1997-919568 | 19970829 |
| | | | | US | 1992-884436 | |
| | | | | | 1993-167586 | |
| | | | | US | 1994-245736 | B219940518 |
| | | | | | 1994-345516 | |
| | | | | US | 1995-380734 | B319950130 |
| | | | | US | 1995-434559 | B119950502 |
| AU | 9851819 | A 1 | 19980611 | ΑU | 1998-51819 | 19980112 |
| AU | 729657 | B2 | 20010208 | | | |
| | | | | US | 1996-623891 | A 19960325 |
| US | 6022962 | A | 20000208 | | 1998-98293 | 19980616 |
| | | | | | 1994-321993 | |
| | | | | | 1996-773297 | |
| US | 6353098 | В1 | 20020305 | | 1998-99083 | 19980617 |
| | | | | | 1992-884436 | |
| | | | | | 1993-167586 | |
| | | | | | 1994-245736 | |
| | | | | | 1994-345516 | |
| | | | | | 1995-380734 | |
| | | | | | 1995-434559 | |
| | | | | | 1997-919568 | |
| AU | 9939188 | A1 | 19990916 | | 1999-39188 | 19990713 |
| *** | C407117 | 51 | 0000000 | | 1995-26422 | A319950518 |
| US | 6437117 | B1 | 20020820 | | 1999-363238 | 19990727 |
| | | | | | 1992-884436 | |
| | | | | | 1993-167586
1994-245736 | |
| | | | | | 1994-245736 | |
| | | | | | 1995-380734 | |
| | | | | | 1995-432876 | |
| | | | | | 1997~911869 | |
| ΠC | 6365374 | В1 | 20020402 | | 1999-376687 | |
| 0.5 | 0303374 | DI | 20020402 | | 1994-218934 | |
| | | | | | 1996-710113 | |
| US | 2002197684 | A 1 | 20021226 | | 2002-104956 | |
| O.D | 2002137001 | | 20021200 | | 1994-218934 | |
| | | | | | 1996-710113 | |
| | | | | | 1999-376687 | |
| US | 2003166917 | A1 | 20030904 | | 2002-156432 | 20020528 |
| | 6649751 | B2 | 20031118 | | | |
| | | | • | បន | 1992-884436 | B119920514 |
| | | | | | 1993-167586 | |
| | | | | | 1994-245736 | - |
| | | | | | 1994-345516 | |
| | | | | | 1995-380734 | |
| | | | | | | |

| GAN. | US 2003088087 | A1 | 20030508 | | US 1995-432876 A119950502
US 1997-911869 A119970815
US 1999-363238 A119990727
US 2002-231874 20020830
US 1992-884436 B119920514
US 1993-167586 B219931214
US 1994-245736 B219940518
US 1994-345516 B219941128
US 1995-380734 B319950130
US 1995-433218 A119950502 |
|------|--|----------|----------------------|-----|--|
| FAN | PATENT NO. | KIND | DATE | | APPLICATION NO. DATE |
| PI | WO 9531541
WO 9531541
W: AU, CA, | A2
A3 | 19960425 | | WO 1995-US6368 19950518 |
| | RW: AT, BE, | CH, DE | , DK, ES, | FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE |
| | US 5646042 | A | 19970708 | | US 1994-245466 A 19940518
US 1995-373124 A 19950113
US 1995-373124 19950113
US 1992-936422 B119920826
US 1992-987132 B219921207 |
| | US 5817796 | А | 19981006 | | US 1994-192943 A219940207
US 1994-245466 B119940518
US 1995-435628 19950505
US 1992-936422 B119920826
US 1992-987132 B219921207
US 1994-192943 A219940207 |
| | AU 9526422 | A1 | 19951205 | | US 1994-245466 B219940518
US 1995-373124 A319950113
AU 1995-26422 19950518
US 1994-245466 A 19940518
US 1995-373124 A 19950113
WO 1995-US6368 W 19950518 |
| | EP 763106 | | 19970319 | | EP 1995-921311 19950518 |
| | R: AT, BE, | CH, DE, | , DK, ES, | FR, | GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
US 1994-245466 A 19940518
US 1995-373124 A 19950113
WO 1995-US6368 W 19950518 |
| | JP 10500309 | Т2 | 19980113 | | JP 1995-529908 19950518
US 1994-245466 A 19940518
US 1995-373124 A 19950113 |
| | US 6103890 | A | 20000815 | | WO 1995-US6368 W 19950518
US 1997-998099 19971224
US 1994-245466 B219940518
US 1995-373124 A219950113
US 1997-37658P P 19970123 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | | AU 1998-51819 19980112 |
| | AU 9939188 | A1 | 19990916 | | US 1996-623891 A 19960325
AU 1999-39188 19990713 |
| FAN | 1996:200453 | | | | AU 1995-26422 A319950518 |
| | PATENT NO. | KIND | DATE | | APPLICATION NO. DATE |
| PI | US 5496698 | Α | 19960305 | | US 1992-987130 19921207
US 1992-935854 B219920826 |

```
WO 9323569
                       19931125
                                      WO 1993-US4020
                                                     19930429
                 A1
    W: AU, CA, JP
    RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                      US 1992-882689 A 19920511
                                      US 1992-882712 A 19920514
                                      US 1992-882713 A 19920514
                                      US 1992-882714 A 19920514
                                      US 1992-882823 A 19920514
                                      US 1992-882824 A 19920514
                                      US 1992-882886 A 19920514
                                      US 1992-882888 A 19920514
                                      US 1992-882889 A 19920514
                                      US 1992-882921 A 19920514
                                      US 1992-882922 A 19920514
                                      US 1992-883823 A 19920514
                                      US 1992-883849 A 19920514
                                      US 1992-884073 A 19920514
                                      US 1992-884074 A 19920514
                                      US 1992-884333 A 19920514
                                      US 1992-884422 A 19920514
                                      US 1992-884431 A 19920514
                                      US 1992-884436 A 19920514
                                      US 1992-884521 A 19920514
                                      US 1992-923738 19920731
                                      US 1992-935854
                                                     19920826
                                      US 1992-936086
                                                     19920826
                                      US 1992-948359
                                                     19920918
                                      US 1992-963322
                                                     19921015
                                      US 1992-987129
                                                     19921207
                                      US 1992-987130
                                                     19921207
                                      US 1992-987133
                                                       19921207
               A1
AU 9342229
                       19931213
                                      AU 1993-42229
                                                       19930429
                       19980305
AU 687736
                 В2
                                      US 1992-882689 A 19920511
                                      US 1992-882712 P 19920514
                                      US 1992-882713 P 19920514
                                      US 1992-882714 P 19920514
                                      US 1992-882823 P 19920514
                                      US 1992-882824 P 19920514
                                      US 1992-882886 P 19920514
                                      US 1992-882922 A 19920514
                                      US 1992-883823 A 19920514
                                      US 1992-883849 A 19920514
                                      US 1992-884073 A 19920514
                                      US 1992-884074 A 19920514
                                      US 1992-884333 A 19920514
                                      US 1992-884422 A 19920514
                                      US 1992-884431 A 19920514
                                      US 1992-884436 A 19920514
                                      US 1992-884521 A 19920514
                                      US 1992-923738 A 19920731
                                      US 1992-935854 A 19920826
                                      US 1992-936086 A 19920826
                                      US 1992-948359 19920918
                                                     19921015
                                      US 1992-963322
                                      US 1992-987129 19921207
                                      US 1992-987130
                                                      19921207
```

```
US 1992-987133
                                                        19921207
                                       WO 1993-US4020
                                                        19930429
                                       US 1992-882888
                                                        19920514
                                       US 1992-882889
                                                        19920514
                                       US 1992-882921
                                                        19920514
                                                       19930429
EP 642589
                  Α1
                       19950315
                                       EP 1993-910893
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                       US 1992-882689 A 19920511
                                       US 1992-882712 A 19920514
                                       US 1992-882713 A 19920514
                                       US 1992-882714 A 19920514
                                       US 1992-882823 A 19920514
                                      US 1992-882824 A 19920514
                                      US 1992-882886 A 19920514
                                      US 1992-882888 A 19920514
                                      US 1992-882889 A 19920514
                                      US 1992-882921 A 19920514
                                      US 1992-882922 A 19920514
                                      US 1992-883823 A 19920514
                                      US 1992-883849 A 19920514
                                      US 1992-884073 A 19920514
                                      US 1992-884074 A 19920514
                                      US 1992~884333 A 19920514
                                      US 1992-884422 A 19920514
                                      US 1992-884431 A 19920514
                                      US 1992-884436 A 19920514
                                      US 1992-884521 A 19920514
                                      US 1992-923738
                                                       19920731
                                      US 1992-935854
                                                       19920826
                                      US 1992-936086
                                                      19920826
                                      US 1992~948359
                                                      19920918
                                      US 1992-963322
                                                       19921015
                                      WO 1993-US4020
                                                       19930429
                                      US 1992-987129
                                                        19921207
                                      US 1992-987130
                                                        19921207
                                      US 1992-987133
                                                        19921207
JP 08500481
                  T2
                       19960123
                                       JP 1993-520255
                                                        19930429
                                      US 1992-882689 A 19920511
                                      US 1992-882712 A 19920514
                                      US 1992-882713 A 19920514
                                      US 1992-882714 A 19920514
                                      US 1992-882823 A 19920514
                                      US 1992-882824 A 19920514
                                      US 1992-882886 A 19920514
                                      US 1992-882888 A 19920514
                                      US 1992-882889 A 19920514
                                      US 1992-882921 A 19920514
                                      US 1992-882922 A 19920514
                                      US 1992-883823 A 19920514
                                      US 1992-883849 A 19920514
                                      US 1992-884073 A 19920514
                                      US 1992-884074 A 19920514
                                      US 1992-884333 A 19920514
                                      US 1992-884422 A 19920514
                                      US 1992-884431 A 19920514
                                      US 1992-884436 A 19920514
                                      US 1992-884521 A 19920514
```

09951006.3 Page 116

| | | | US 1992-923738 19920731
US 1992-935854 19920826
US 1992-936086 19920826
US 1992-948359 19920918
US 1992-963322 19921015
WO 1993-US4020 19930429
US 1992-987129 19921207
US 1992-987130 19921207
US 1992-987133 19921207 |
|---------------|----|----------|---|
| JP 2000342285 | A2 | 20001212 | JP 2000-132616 19930429 US 1992-882689 A 19920511 US 1992-882712 A 19920514 US 1992-882713 A 19920514 US 1992-882714 A 19920514 US 1992-882823 A 19920514 US 1992-882824 A 19920514 US 1992-882886 A 19920514 US 1992-882888 A 19920514 |
| | | | US 1992-882889 A 19920514
US 1992-882921 A 19920514
US 1992-882922 A 19920514
US 1992-883823 A 19920514
US 1992-883849 A 19920514
US 1992-884073 A 19920514
US 1992-884074 A 19920514
US 1992-884333 A 19920514
US 1992-884422 A 19920514 |
| | | | US 1992-884431 A 19920514 US 1992-884436 A 19920514 US 1992-884521 A 19920514 US 1992-923738 A 19920731 US 1992-935854 A 19920826 US 1992-936086 A 19920826 US 1992-948359 A 19920918 US 1992-963322 A 19921015 US 1992-987129 A 19921207 |
| JP 2000342286 | A2 | 20001212 | US 1992-987130 A 19921207 US 1992-987133 A 19921207 JP 1993-520255 A319930429 JP 2000-132651 19930429 US 1992-882689 A 19920511 US 1992-882712 A 19920514 US 1992-882713 A 19920514 US 1992-882823 A 19920514 US 1992-882824 A 19920514 US 1992-882824 A 19920514 US 1992-882886 A 19920514 US 1992-882888 A 19920514 US 1992-882888 A 19920514 |
| | | | US 1992-882889 A 19920514 US 1992-882921 A 19920514 US 1992-882922 A 19920514 US 1992-883823 A 19920514 US 1992-883849 A 19920514 US 1992-884073 A 19920514 US 1992-884074 A 19920514 US 1992-884333 A 19920514 US 1992-884422 A 19920514 |

```
US 1992-884431 A 19920514
                                          US 1992-884436 A 19920514
                                          US 1992-884521 A 19920514
                                          US 1992-923738 A 19920731
                                          US 1992-935854 A 19920826
                                          US 1992-936086 A 19920826
                                          US 1992-948359 A 19920918
                                          US 1992-963322 A 19921015
                                          US 1992-987129 A 19921207
                                          US 1992-987130 A 19921207
                                          US 1992-987133 A 19921207
                                          JP 1993-520255 A319930429
    __ 1208296
EP 1288296
                    A2
                           20030305
                                          EP 2002-8657
                                                           19930429
                     A3
                           20030312
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                          US 1992-882689 A 19920511
                                          US 1992-882712 A 19920514
                                          US 1992-882713 A 19920514
                                          US 1992-882714 A 19920514
                                          US 1992-882823 A 19920514
                                          US 1992-882824 A 19920514
                                          US 1992-882886 A 19920514
                                          US 1992-882888 A 19920514
                                          US 1992-882889 A 19920514
                                          US 1992-882921 A 19920514
                                          US 1992-882922 A 19920514
                                          US 1992-883823 A 19920514
                                          US 1992-883849 A 19920514
                                          US 1992-884073 A 19920514
                                          US 1992-884074 A 19920514
                                          US 1992-884333 A 19920514
                                          US 1992-884422 A 19920514
                                          US 1992-884431 A 19920514
                                          US 1992-884436 A 19920514
                                          US 1992-884521 A 19920514
                                          US 1992-923738 A 19920731
                                          US 1992-935854 A 19920826
                                          US 1992-936086 A 19920826
                                          US 1992-948359 A 19920918
                                          US 1992-963322 A 19921015
                                          US 1992-987129 A 19921207
                                          US 1992-987130 A 19921207
                                          US 1992-987133 A 19921207
                                          EP 1993-910893 A319930429
                                          AU 1998-51819
                     A1
                           19980611
                                                           19980112
    AU 9851819
    AU 729657
                      B2
                           20010208
                                          US 1996-623891 A 19960325
                                          AU 1999-39188 19990713
                     A1
                           19990916
    AU 9939188
                                          AU 1995-26422 A319950518
FAN
   1996:485819
                                         APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
                                          _____
                     _---
                           _____
                                          WO 1995-US15516 19951122
PΙ
    WO 9618736
                      A2
                            19960620
    WO 9618736
                      A3
                           19960919
        W: AU, CA, JP, MX
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                          US 1994-354920 A 19941213
```

```
US 1994-363253 A 19941223
                                       US 1994-363254 A 19941223
                                       US 1995-390850 A 19950217
                                       US 1995-426124 A 19950420
                                       US 1995-432874 A 19950502
                                       US 1995-434509 A 19950504
                                       US 1995-512861 A 19950807
                                       US 1995-541365 A 19951005
US 5891683
                       19990406
                                      US 1994-363253
                  Α
                                                        19941223
                                       US 1993-116177 B219930902
                                       US 1993-152481 B219931112
                                       US 1994-233748 B219940419
US 5891684
                  Α
                       19990406
                                       US 1994-363254
                                       US 1992-963322 B219921015
                                       US 1993-149210 B219931108
US 5612215
                  Α
                       19970318
                                       US 1995-390850
                                                       19950217
                                       US 1992-989848 B219921207
                                       US 1993-152487 B219931112
                                       US 1994-354920 B219941213
US 5716824
                  Α
                       19980210
                                      US 1995-426124
                                                        19950420
US 5627053
                  Α
                      19970506
                                      US 1995-432874
                                                        19950502
                                      US 1994-218934 A219940329
                                      US 1994-222795 A219940404
US 6146886
                 Α
                      20001114
                                      US 1995-512861
                                                       19950807
                                       US 1994-293520 B219940819
                                      US 1994-337608 A219941110
US 5672501
                  Α
                       19970930
                                      US 1995-541365
                                                      19951005
                                      US 1994-363254 A219941223
EP 799313
                  A2
                       19971008
                                      EP 1995-942944 19951122
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                       US 1994-354920 A 19941213
                                       US 1994-363253 A 19941223
                                       US 1994-363254 A 19941223
                                       US 1995-390850 A 19950217
                                      US 1995-426124 A 19950420
                                       US 1995-432874 A 19950502
                                      US 1995-434509 A 19950504
                                      US 1995-951P
                                                    P 19950707
                                                     P 19950707
                                      US 1995-974P
                                       US 1995-512861 A 19950807
                                      US 1995-541365 A 19951005
                                      WO 1995-US15516W 19951122
JP 2001526521
                  T2
                       20011218
                                       JP 1996-519035
                                                        19951122
                                      US 1994-354920 A 19941213
                                      US 1994-363253 A 19941223
                                      US 1994-363254 A 19941223
                                      US 1995-390850 A 19950217
                                      US 1995-426124 A 19950420
                                      US 1995-432874 A 19950502
                                      US 1995-434509 A 19950504
                                      US 1995-951P
                                                   P 19950707
                                      US 1995-974P
                                                     P 19950707
                                      US 1995-541365 A 19951005
                                      WO 1995-US15516W 19951122
                  A1
                       19960703
AU 9644120
                                      AU 1996-44120
                                                     19951130
                                      US 1994-354920 A 19941213
                                      US 1994-363253 A 19941223
```

| | | | | | | US
US
US
US
US | 1994-363254
1995-390850
1995-426124
1995-432874
1995-434509
1995-512861
1995-541365 | A
A
A
A
A | 19950217
19950420
19950502
19950504
19950807
19951005 |
|-----|----------------------------------|--|--|---|-----|----------------------------------|---|-----------------------------------|--|
| | បន | 5840876 | A | 19981124 | | US | 1995-US15510
1997-873793
1995-426124 | | 19970612 |
| | | 9851819
729657 | A1
B2 | 19980611
20010208 | | | 1998-51819 | | |
| | US | 6239272 | B1 | 20010529 | | US
US | 1996-623891
1998-98694
1995-426124 | A1 | 19980617
19950420 |
| | AU | 9939188 | A1 | 19990916 | | AU | 1997-873793
1999-39188
1995-26422 | | 19990713 |
| | | 2001012618
6451540 | A1
B2 | 20010809
20020917 | | | 2001-804824
1995-426124 | | |
| | | | | | | US
US | 1997-873793
1998-98694 | A1
A1 | .19970612
.19980617 |
| | US | 2003165900 | A1 | 20030904 | | US
US
US | 2002-174850
1995-426124
1997-873793
1998-98694 | A1
A1
A1 | .19950420
.19970612
.19980617 |
| FAN | 199 | 97:85100 | | | | US | 2001-804824 | Al | .20010313 |
| | PA | | KIND | DATE | | API | PLICATION NO | • | DATE |
| ΡI | EP | TENT NO. |
A2 | 19961211 | | | PLICATION NO
1996-109054 | - | DATE

19960605 |
| ΡΙ | EP | FENT NO.

747489
747489 | A2
A3 |
19961211
19970521 | | EP
FR, O
US | 1996-109054
5B, IT, LI, 1
1995-475460
1995-483715 | LU,
A
A | 19960605
NL, SE
19950607
19950607 |
| PI | EP
EP | FENT NO.

747489
747489 | A2
A3
E, CH, DE, |
19961211
19970521 | FI, | FR, CUS US US CA US US | 1996-109054
5B, IT, LI, 1
1995-475460
1995-483715
1995-484607
1995-484607
1996-222230
1995-475460
1995-483715 | LU,
A
A
A
A | 19960605
NL, SE
19950607
19950607
19950607
19960603
19950607
19950607 |
| PI | EP
EP
US
CA | 747489
747489
R: AT, BI
5747252
2222305 | A2
A3
E, CH, DE,
A
AA
AA | 19961211
19970521
DK, ES, | FI, | EP FR, C US US US CA US US US US | 1996-109054
5B, IT, LI, 1
1995-475460
1995-483715
1995-484607
1995-484607
1996-222230
1995-475460 | LU,
A
A
A
A
A
A | 19960605
NL, SE
19950607
19950607
19950607
19960603
19950607
19950607 |
| PI | EP
EP
US
CA
WO
WO | 747489
747489
R: AT, BI
5747252
2222305 | A2
A3
E, CH, DE,
A
AA | 19961211
19970521
DK, ES,
19980505
19961219 | FI, | FR, CUS US CA US US WO US US US | 1996-109054
5B, IT, LI, 1
1995-475460
1995-483715
1995-484607
1995-484607
1996-222230
1995-475460
1995-483715
1995-484607 | LU,
AAA
5 AAA
5 AAA | 19960605
NL, SE
19950607
19950607
19950607
19950607
19950607
19950607
19950607 |
| PI | EP
EP
US
CA
WO
WO | 747489 747489 R: AT, BI 5747252 2222305 9641017 9641017 W: AU, Ca | A2
A3
E, CH, DE,
A
AA
AA
A2
A3
A, JP, KR | 19961211
19970521
DK, ES,
19980505
19961219
19961219
19970515 | FI, | FR, CUS US US US US AU US US WO | 1996-109054
5B, IT, LI, 1995-475460
1995-483715
1995-484607
1995-484607
1996-2222305
1995-475460
1995-483715
1995-484607
1996-US10215
1995-483715
1995-483715
1995-484607 | LUAAA 5 AAA AAAA 5 AAA | 19960605 NL, SE 19950607 19950607 19950607 19950607 19950607 19950607 19950607 19950607 19950607 19950607 |

| | | | | US 1995-484607 A 19950607 |
|----------|--------------------------|------------|-----------|--|
| | | | | WO 1996-US10215W 19960603 |
| | US 6100027 | A | 20000808 | US 1997-962369 19971031 |
| | | | | US 1995-484607 Al19950607 |
| | AU 9851819 | A1 | 19980611 | AU 1998-51819 19980112 |
| | AU 729657 | B2 | 20010208 | |
| | | | | US 1996-623891 A 19960325 |
| | AU 9939188 | A 1 | 19990916 | |
| | | | | AU 1995-26422 A319950518 |
| | AU 9947564 | | 19991104 | AU 1999-47564 19990913 |
| | AU 734526 | В2 | 20010614 | |
| | | | | US 1995-475460 A 19950607 |
| | | | | US 1995-483715 A 19950607 |
| | | | | US 1995-484607 A 19950607 |
| | | | | AU 1996-61744 A319960603 |
| | US 6541201 | B1 | 20030401 | |
| | | | | US 1995-484607 A119950607 |
| | **** 2002100004 | 7. 7 | 20021022 | US 1997-962369 Al19971031 |
| | US 2003198984 | Al | 20031023 | US 2003-365034 20030212
US 1995-484607 A119950607 |
| | | | | US 1997-962369 A119971031 |
| | | | | US 1999-394175 A119990913 |
| די א אים | 1997:204368 | | | |
| гъти | T331.204200 | KIND | FTAC | APPLICATION NO. DATE |
| | PATENT NO. | | | APPLICATION NO. DATE |
| ΡI | | | | US 1994-182968 19940113 |
| | | | | US 1992-882888 B219920514 |
| | CA 2180740 | AA | 19950720 | CA 1995-2180740 19950112 |
| | | | | US 1994-182968 A 19940113 |
| | WO 9519429 | | | WO 1995-US495 19950112 |
| | | | 19950908 | |
| | W: AU, CA, | | | |
| | RW: AT, BE, | CH, DE, | , DK, ES, | FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |
| | 247 0545665 | 2.1 | 10050001 | US 1994-182968 A 19940113 |
| | AU 9515665 | Al | 19950801 | AU 1995-15665 19950112 |
| | | | | US 1994-182968 A 19940113
WO 1995-US495 W 19950112 |
| | ED 727247 | 7.1 | 10061016 | EP 1995-907430 19950112 |
| | | | | FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE |
| | K: AI, DE, | CII, DE | , DR, ES, | US 1994-182968 A 19940113 |
| | | | | WO 1995-US495 W 19950112 |
| | JP 09508018 | ፐ 2 | 19970819 | |
| | 01 03000010 | | 133,0013 | US 1994-182968 A 19940113 |
| | | | | WO 1995-US495 W 19950112 |
| | US 5869253 | Α | 19990209 | US 1996-774306 19961226 |
| | | | | US 1992-882888 B219920514 |
| | | | | US 1994-182968 A119940113 |
| | AU 9851819 | A 1 | 19980611 | AU 1998-51819 19980112 |
| | AU 729657 | B2 | 20010208 | |
| | | | | US 1996-623891 A 19960325 |
| | | _ | 20001017 | US 1998-64156 19980421 |
| | US 6132966 | A | ZOCCICI. | |
| | US 6132966 | Α | 20001017 | US 1992-882888 B219920514 |
| | US 6132966 | A | 20001011 | US 1992-882888 B219920514
US 1994-182968 A119940113 |
| | | | | US 1992-882888 B219920514
US 1994-182968 A119940113
US 1996-774306 A119961223 |
| | US 6132966
AU 9939188 | A
A1 | 19990916 | US 1992-882888 B219920514 US 1994-182968 A119940113 US 1996-774306 A119961223 AU 1999-39188 19990713 |
| FAN | | | | US 1992-882888 B219920514
US 1994-182968 A119940113
US 1996-774306 A119961223 |

| | PATENT NO. | KIND DATE | APPLICATION NO. DATE |
|----|--------------------------|---|---|
| PI | EP 786522 | A2 19970730 | US 1995-390850 19950217
US 1992-989848 B219921207
US 1993-152487 B219931112
US 1994-354920 B219941213
EP 1997-101534 19930702 |
| | R: AT, CH, | A3 19970827
DE, ES, FR, GB, IT, | US 1992-916763 A 19920717
US 1992-987132 A 19921207
US 1992-989848 A 19921207
US 1992-989849 A 19921207
US 1993-8895 A 19930119
EP 1993-918144 A319930702 |
| | EP 1251170 | A2 20021023
A3 20021030
CH, DE, DK, ES, FR, | EP 2002-5642 19930702 GB, GR, IT, LI, LU, NL, SE, MC, PT, IE US 1992-916763 A 19920717 US 1992-987132 A 19921207 US 1992-989848 A 19921207 US 1992-989849 A 19921207 US 1993-8895 A 19930119 |
| | US 5731295 | A 19980324 | EP 1993-918144 A319930702
US 1995-435634 19950505
US 1992-989848 B219921207
US 1993-152487 B219931112
US 1994-354920 B219941213
US 1995-390850 A319950217 |
| | | AA 19960620 | CA 1995-2207593 19951122
US 1994-354920 A 19941213
US 1994-363253 A 19941223
US 1994-363254 A 19941223
US 1995-390850 A 19950217
US 1995-426124 A 19950420
US 1995-432874 A 19950502
US 1995-434509 A 19950504
US 1995-512861 A 19950807
US 1995-541365 A 19951005 |
| | WO 9618736
WO 9618736 | A2 19960620
A3 19960919 | WO 1995-US15516 19951122 |
| | | CH, DE, DK, ES, FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432674 A 19950502 US 1995-434509 A 19950504 US 1995-512861 A 19950807 US 1995-541365 A 19951005 |
| | EP 799313
R: AT, BE, | A2 19971008
CH, DE, DK, ES, FR, | EP 1995-942944 19951122 GB, GR, IT, LI, LU, NL, SE, MC, PT, IE US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 |

| | | | | | US 1995-390850 A 19950217
US 1995-426124 A 19950420
US 1995-432874 A 19950502
US 1995-434509 A 19950504
US 1995-951P P 19950707
US 1995-974P P 19950707
US 1995-512861 A 19950807
US 1995-541365 A 19951005 |
|-----|--------------------------|----------|---------------------------------|-----|--|
| | JP 2001526521 | T2 | 20011218 | | WO 1995-US15516W 19951122 JP 1996-519035 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-951P P 19950707 US 1995-974P P 19950707 US 1995-541365 A 19951005 |
| | AU 9644120 | A1 | 19960703 | | WO 1995-US15516W 19951122 AU 1996-44120 19951130 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-512861 A 19950807 US 1995-541365 A 19951005 WO 1995-US15516W 19951122 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | | AU 1998-51819 19980112 |
| | AU 9939188 | A1 | 19990916 | | US 1996-623891 A 19960325
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| FAN | 1997:231448 PATENT NO. | | DATE | | APPLICATION NO. DATE |
| PI | US 5616488
EP 786522 | _ | 19970401 | | US 1994-319492 19941007
US 1992-989849 B219921207
US 1993-8895 B219930119
EP 1997-101534 19930702 |
| | EP 1251170 | DE, ES, | 19970827
FR, GB,
20021023 | IT, | LI, SE US 1992-916763 A 19920717 US 1992-987132 A 19921207 US 1992-989848 A 19921207 US 1992-989849 A 19921207 US 1993-8895 A 19930119 EP 1993-918144 A319930702 EP 2002-5642 19930702 |
| | EP 1251170
R: AT, BE, | | 20021030
DK, ES, | FR, | GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
US 1992-916763 A 19920717
US 1992-987132 A 19921207 |

```
US 1992-989848 A 19921207
                                      US 1992-989849 A 19921207
                                      US 1993-8895 A 19930119
                                      EP 1993-918144 A319930702
CA 2183992
                AA
                     19950831
                                      CA 1995-2183992 19950223
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847 19941104
                                      US 1994-337608
                                                       19941110
                                      US 1994-345516
                                                      19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                      19941223
                                      US 1995-380734
                                                       19950130
WO 9523225
                 A2
                       19950831
                                      WO 1995-IB156
                                                       19950223
WO 9523225
                 A3
                       19960201
    W: AU, CA, JP, KR, MX
    RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847
                                                      19941104
                                      US 1994-337608
                                                       19941110
```

```
US 1994-345516
                                                      19941128
                                     US 1994-357577
                                                      19941216
                                     US 1994-363233
                                                      19941223
                                                      19950130
                                     US 1995-380734
EP 746614
                 A1 19961211
                                     EP 1995-909920 19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                     WO 1995-IB156 W 19950223
                                     US 1994-201109 A 19940223
                                     US 1994-218934 A 19940329
                                     US 1994-222795 A 19940404
                                     US 1994-224483 A 19940407
                                     US 1994-228041 A 19940415
                                     US 1994-227958 A 19940415
                                     US 1994-245736 A 19940518
                                     US 1994-271280 A 19940706
                                     US 1994-291932 A 19940815
                                     US 1994-291433 A 19940816
                                     US 1994-292620 A 19940817
                                     US 1994-293520 A 19940819
                                     US 1994-300000 A 19940902
                                     US 1994-303039 A 19940908
                                     US 1994-311486 A 19940923
                                     US 1994-311749 A 19940923
                                     US 1994-314397 A 19940928
                                     US 1994-316771 A 19941003
                                     US 1994-319492 A 19941007
                                     US 1994-321993 19941011
                                     US 1994-334847
                                                    19941104
                                     US 1994-337608
                                                     19941110
                                     US 1994-345516
                                                    19941128
                                     US 1994-357577
                                                     19941216
                                                    19941223
                                     US 1994-363233
                                     US 1995-380734
                                                     19950130
            T2 19970922
                                     JP 1995-522236 19950223
JP 09509323
                                     WO 1995-IB156 W 19950223
                                     US 1994-201109 A 19940223
                                     US 1994-218934 A 19940329
                                     US 1994-222795 A 19940404
                                     US 1994-227958 A 19940415
                                     US 1994-228041 A 19940415
                                     US 1994-245736 A 19940518
                                     US 1994-271280 A 19940706
                                     US 1994-291932 A 19940815
                                     US 1994-291433 A 19940816
                                     US 1994-292620 A 19940817
                                     US 1994-293520 A 19940819
                                     US 1994-300000 A 19940902
                                     US 1994-311486 A 19940923
                                     US 1994-311749 A 19940923
                                     US 1994-314397 A 19940928
                                     US 1994-316771 A 19941003
                                     US 1994-319492 A 19941007
                                     US 1994-321993 A 19941011
                                     US 1994-334847 A 19941104
                                     US 1994-337608 19941110
                                     US 1994-345516
                                                    19941128
                                     US 1994-357577
                                                     19941216
```

| | | US 1994-363233 19941223 |
|------------|--------------------|--|
| PD 1060506 | 30 00001107 | US 1995-380734 19950130
EP 2002-13004 19950223 |
| | | FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE |
| R: AT, B | E, CH, DE, DA, ES, | |
| | | US 1994-201109 A 19940223 |
| | | US 1994-218934 A 19940329 |
| | | US 1994-222795 A 19940404 |
| | | US 1994-224483 A 19940407 |
| | | US 1994-227958 A 19940415 |
| | | US 1994-228041 A 19940415 |
| | | US 1994-245736 A 19940518 |
| | | US 1994-271280 A 19940706 |
| | | US 1994-291932 A 19940815
US 1994-291433 A 19940816 |
| | | |
| | | US 1994-292620 A 19940817
US 1994-293520 A 19940819 |
| | | US 1994-293520 A 19940019
US 1994-300000 A 19940902 |
| | | US 1994-303039 A 19940908 |
| | | US 1994-303039 A 19940908
US 1994-311486 A 19940923 |
| | | |
| | | US 1994-311749 A 19940923
US 1994-314397 A 19940928 |
| | | US 1994-316771 A 19941003 |
| | | US 1994-319492 A 19941007 |
| | | US 1994-321993 A 19941011 |
| | | US 1994-334847 A 19941104 |
| | | US 1994-337608 A 19941110 |
| | | US 1994-345516 A 19941128 |
| | | US 1994-357577 A 19941216 |
| | | US 1994-363233 A 19941223 |
| | | US 1995-380734 A 19950130 |
| | | EP 1995-909920 A319950223 |
| US 5616490 | A 19970401 | |
| | | US 1992-989849 B219921207 |
| | | US 1993-8895 B119930119 |
| AU 9851819 | A1 19980611 | AU 1998-51819 19980112 |
| AU 729657 | B2 20010208 | |
| | | US 1996-623891 A 19960325 |
| AU 9939188 | A1 19990916 | AU 1999-39188 19990713 |
| | | AU 1995-26422 A319950518 |
| AU 9947567 | | AU 1999-47567 19990913 |
| AU 737017 | B2 20010809 | |
| | | AU 1996-61744 A319960603 |
| | | US 1995-475460 A 19950607 |
| | | US 1994-292620 A 19940817 |
| | | US 1995-483715 A 19950607 |
| | | US 1994-293520 A 19940819 |
| | | US 1995-484607 A 19950607
US 1994-300000 A 19940902 |
| | | US 1994-300000 A 19940902
US 1994-303039 A 19940908 |
| | | US 1994-311486 A 19940923 |
| | | US 1994-311486 A 19940923
US 1994-311749 A 19940923 |
| | | US 1994-311749 A 19940923
US 1994-314397 A 19940928 |
| | | US 1994-314397 A 19940920
US 1994-316771 A 19941003 |
| | | US 1994-319492 A 19941007 |
| | | US 1994-321993 A 19941011 |
| | | US 1994-334847 A 19941104 |
| | | US 1994-337608 A 19941110 |
| | | 20 7221 201000 W T221TTA |

| FAN | 1997:324750
PATENT NO. | KIND | ከል ጥ ፍ | US 1994-345516 A 19941128 US 1994-357577 A 19941216 US 1994-363233 A 19941223 US 1995-380734 19950130 APPLICATION NO. DATE |
|-----|---------------------------|--------------|----------------------|--|
| | | | | |
| PI | | A | | US 1995-432874 19950502
US 1994-218934 A219940329
US 1994-222795 A219940404 |
| | | AA | 19970617
19960620 | US 1994-218934 19940329 CA 1995-2207593 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-512861 A 19950807 US 1995-541365 A 19951005 |
| | WO 9618736
W: AU, CA, | A3
JP, MX | | WO 1995-US15516 19951122 |
| | RW: AT, BE, | | , DK, ES, FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-512861 A 19950807 US 1995-541365 A 19951005 EP 1995-942944 19951122 |
| | R: AT, BE, | | | GB, GR, IT, LI, LU, NL, SE, MC, PT, IE US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-951P P 19950707 US 1995-974P P 19950707 US 1995-512861 A 19950807 US 1995-541365 A 19951005 WO 1995-US15516W 19951122 |
| | JP 2001526521 | T2 | 20011218 | JP 1996-519035 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-951P P 19950707 |

| | AU 9644120 | A1 : | 19960703 | US 1995-974P P 19950707 US 1995-541365 A 19951005 WO 1995-US15516W 19951122 AU 1996-44120 19951130 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-512861 A 19950807 US 1995-541365 A 19951005 WO 1995-US15516W 19951122 |
|-----|--------------------------|---------------|----------------------|--|
| | US 5985621 | A | 19991116 | |
| | AU 9851819
AU 729657 | | 19980611
20010208 | |
| | AU 9939188 | A1 : | 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| | US 6365374 | B1 2 | 20020402 | |
| | US 2002197684 | A1 2 | 20021226 | |
| FAN | 1997:574475 PATENT NO. | | DATE | APPLICATION NO. DATE |
| PI | บร 5658780 | | 19970819 | |
| | EP 786522
EP 786522 | | | |
| | R: AT, CH, | DE, ES, | FR, GB, | US 1992-916763 A 19920717 US 1992-987132 A 19921207 US 1992-989848 A 19921207 US 1992-989849 A 19921207 |
| | EP 1251170
EP 1251170 | A3 . | 20021023
20021030 | |
| | EP 1251170 | A3
CH, DE, | 20021030 | EP 1993-918144 A319930702 EP 2002-5642 19930702 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE |

```
US 1994-224483 A 19940407
                                       US 1994-227958 A 19940415
                                       US 1994-228041 A 19940415
                                       US 1994-245736 A 19940518
                                       US 1994-271280 A 19940706
                                       US 1994-291932 A 19940815
                                       US 1994-291433 A 19940816
                                       WO 1995-IB156 W 19950223
CA 2183992
                AA
                       19950831
                                       CA 1995-2183992 19950223
                                       US 1994-201109 A 19940223
                                       US 1994-218934 A 19940329
                                       US 1994-222795 A 19940404
                                       US 1994-224483 A 19940407
                                       US 1994-227958 A 19940415
                                       US 1994-228041 A 19940415
                                       US 1994-245736 A 19940518
                                       US 1994-271280 A 19940706
                                       US 1994-291932 A 19940815
                                       US 1994-291433 A 19940816
                                       US 1994-292620 A 19940817
                                       US 1994-293520 A 19940819
                                       US 1994-300000 A 19940902
                                       US 1994-303039 A 19940908
                                       US 1994-311486 A 19940923
                                       US 1994-311749 A 19940923
                                       US 1994-314397 A 19940928
                                       US 1994-316771 A 19941003
                                       US 1994-319492 A 19941007
                                       US 1994-321993 A 19941011
                                       US 1994-334847 19941104
                                       US 1994-337608
                                                       19941110
                                       US 1994-345516
                                                      19941128
                                       US 1994-357577
                                                       19941216
                                       US 1994-363233
                                                      19941223
                                       US 1995-380734
                                                        19950130
                                       WO 1995-IB156
                                                       19950223
WO 9523225
                  A2
                       19950831
WO 9523225
                  А3
                       19960201
    W: AU, CA, JP, KR, MX
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                       US 1994-201109 A 19940223
                                       US 1994-218934 A 19940329
                                       US 1994-222795 A 19940404
                                       US 1994-224483 A 19940407
                                       US 1994-227958 A 19940415
                                       US 1994-228041 A 19940415
                                       US 1994-245736 A 19940518
                                       US 1994-271280 A 19940706
                                       US 1994-291932 A 19940815
                                       US 1994-291433 A 19940816
                                       US 1994-292620 A 19940817
                                       US 1994-293520 A 19940819
                                       US 1994-300000 A 19940902
                                       US 1994-303039 A 19940908
                                       US 1994-311486 A 19940923
                                       US 1994-311749 A 19940923
                                       US 1994-314397 A 19940928
                                       US 1994-316771 A 19941003
```

```
US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847 19941104
                                                     19941110
                                      US 1994-337608
                                      US 1994-345516
                                                      19941128
                                      US 1994-357577
                                                      19941216
                                      US 1994-363233
                                                      19941223
                                     US 1995-380734
                                                      19950130
                 A1 19961211
EP 746614
                                     EP 1995-909920 19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                     WO 1995-IB156 W 19950223
                                      US 1994-201109 A 19940223
                                     US 1994-218934 A 19940329
                                     US 1994-222795 A 19940404
                                     US 1994-224483 A 19940407
                                     US 1994-228041 A 19940415
                                     US 1994-227958 A 19940415
                                     US 1994-245736 A 19940518
                                     US 1994-271280 A 19940706
                                     US 1994-291932 A 19940815
                                     US 1994-291433 A 19940816
                                     US 1994-292620 A 19940817
                                     US 1994-293520 A 19940819
                                     US 1994-300000 A 19940902
                                     US 1994-303039 A 19940908
                                     US 1994-311486 A 19940923
                                     US 1994-311749 A 19940923
                                     US 1994-314397 A 19940928
                                     US 1994-316771 A 19941003
                                     US 1994-319492 A 19941007
                                     US 1994-321993 19941011
                                     US 1994-334847
                                                    19941104
                                     US 1994-337608
                                                    19941110
                                     US 1994-345516
                                                    19941128
                                     US 1994-357577
                                                    19941216
                                     US 1994-363233 19941223
                                     US 1995-380734
                                                     19950130
                     19970922
JP 09509323
                 T2
                                     JP 1995-522236 19950223
                                     WO 1995-IB156 W 19950223
                                     US 1994-201109 A 19940223
                                     US 1994-218934 A 19940329
                                     US 1994-222795 A 19940404
                                     US 1994-227958 A 19940415
                                     US 1994-228041 A 19940415
                                     US 1994-245736 A 19940518
                                     US 1994-271280 A 19940706
                                     US 1994-291932 A 19940815
                                     US 1994-291433 A 19940816
                                     US 1994-292620 A 19940817
                                     US 1994-293520 A 19940819
                                     US 1994-300000 A 19940902
                                     US 1994-311486 A 19940923
                                     US 1994-311749 A 19940923
                                     US 1994-314397 A 19940928
                                     US 1994-316771 A 19941003
                                     US 1994-319492 A 19941007
                                     US 1994-321993 A 19941011
```

```
US 1994-334847 A 19941104
                                       US 1994-337608
                                                      19941110
                                       US 1994-345516
                                                        19941128
                                       US 1994-357577
                                                        19941216
                                       US 1994-363233
                                                        19941223
                                       US 1995-380734
                                                        19950130
EP 1260586
                  A2
                       20021127
                                       EP 2002-13004
                                                        19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                       US 1994-201109 A 19940223
                                       US 1994-218934 A 19940329
                                       US 1994-222795 A 19940404
                                       US 1994-224483 A 19940407
                                       US 1994-227958 A 19940415
                                       US 1994-228041 A 19940415
                                       US 1994-245736 A 19940518
                                       US 1994-271280 A 19940706
                                       US 1994-291932 A 19940815
                                       US 1994-291433 A 19940816
                                       US 1994-292620 A 19940817
                                       US 1994-293520 A 19940819
                                       US 1994-300000 A 19940902
                                       US 1994-303039 A 19940908
                                       US 1994-311486 A 19940923
                                       US 1994-311749 A 19940923
                                       US 1994-314397 A 19940928
                                       US 1994-316771 A 19941003
                                       US 1994-319492 A 19941007
                                       US 1994-321993 A 19941011
                                       US 1994-334847 A 19941104
                                       US 1994-337608 A 19941110
                                       US 1994-345516 A 19941128
                                       US 1994-357577 A 19941216
                                       US 1994-363233 A 19941223
                                       US 1995-380734 A 19950130
                                       EP 1995-909920 A319950223
US 5817796
                  Α
                       19981006
                                       US 1995-435628
                                                        19950505
                                       US 1992-936422 B119920826
                                       US 1992-987132 B219921207
                                       US 1994-192943 A219940207
                                       US 1994-245466 B219940518
                                       US 1995-373124 A319950113
                       20020625
                                      US 1996-777916
US 6410224
                  В1
                                                        19961223
                                       US 1992-987132 B219921207
                                       US 1994~245466 B219940518
                                      US 1994-291932 A119940815
US 6103890
                  Α
                       20000815
                                      US 1997-998099
                                                        19971224
                                      US 1994-245466 B219940518
                                      US 1995-373124 A219950113
                                      US 1997-37658P P 19970123
AU 9851819
                                      AU 1998-51819
                       19980611
                                                        19980112
                  A1
AU 729657
                       20010208
                  B2
                                      US 1996-623891 A 19960325
AU 9939188
                  A1
                       19990916
                                      AU 1999-39188 19990713
                                      AU 1995-26422
                                                      A319950518
                       19991104
                                      AU 1999-48760
AU 9948760
                  A1
                                                        19990916
AU 744191
                  B2
                       20020221
                                      US 1994-201109 A 19940223
```

```
US 1994-218934 A 19940329
                                         US 1994-222795 A 19940404
                                         US 1994-224483 A 19940407
                                         US 1994-227958 A 19940415
                                         US 1994-228041 A 19940415
                                         US 1994-245736 A 19940518
                                         US 1994-271280 A 19940706
                                         US 1994-291932 A 19940815
                                         US 1994-291433 A 19940816
                                         AU 1995-18214 A319950223
                  A1
    US 2002177568
                           20021128
                                         US 2001-864785 20010523
                                         US 1992-987132 B219921207
                                         US 1994-245466 B219940518
                                         US 1994-291932 A119940815
                                         US 1996-777916 A219961223
    US 2003003469
                      A1
                           20030102
                                         US 2002-56414 20020123
                                         US 1992-987132 B219921207
                                         WO 1993-US6316 W 19930702
                                         US 1994-245466 B219940518
                                         US 1994-291932 A119940815
                                         US 1996-777916 All9961223
FAN 1997:640223
    PATENT NO.
                     KIND DATE
                                        APPLICATION NO. DATE
                                         Α
                          19970930
                                         US 1995-541365 19951005
PΙ
    US 5672501
                                         US 1994-363254 A219941223
                    A 19990406
                                         US 1994-363254 19941223
    US 5891684
                                         US 1992-963322 B219921015
                                         US 1993-149210 B219931108
                    AA 19960620
                                         CA 1995-2207593 19951122
    CA 2207593
                                         US 1994-354920 A 19941213
                                         US 1994-363253 A 19941223
                                         US 1994-363254 A 19941223
                                         US 1995-390850 A 19950217
                                         US 1995-426124 A 19950420
                                         US 1995-432874 A 19950502
                                         US 1995-434509 A 19950504
                                         US 1995-512861 A 19950807
                                         US 1995-541365 A 19951005
    WO 9618736
                    A2
                           19960620
                                         WO 1995-US15516 19951122
    WO 9618736
                     A3
                           19960919
        W: AU, CA, JP, MX
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                         US 1994-354920 A 19941213
                                         US 1994-363253 A 19941223
                                         US 1994-363254 A 19941223
                                         US 1995-390850 A 19950217
                                         US 1995-426124 A 19950420
                                         US 1995-432874 A 19950502
                                         US 1995-434509 A 19950504
                                         US 1995-512861 A 19950807
                                         US 1995-541365 A 19951005
    EP 799313 A2 19971008
                                         EP 1995-942944 19951122
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                         US 1994-354920 A 19941213
                                         US 1994-363253 A 19941223
                                         US 1994-363254 A 19941223
```

| | JP 2001526521 | Т2 | 20011218 | US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-434509 A 19950502 US 1995-951P P 19950707 US 1995-974P P 19950707 US 1995-512861 A 19950807 US 1995-512861 A 19950807 US 1995-541365 A 19951005 WO 1995-US15516W 19951122 UP 1996-519035 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-436874 A 19950502 US 1995-434509 A 19950504 |
|-----|-------------------------|------|-----------------------|---|
| | AU 9644120 | A1 | 19960703 | US 1995-951P P 19950707 US 1995-974P P 19950707 US 1995-541365 A 19951005 WO 1995-US15516W 19951122 AU 1996-44120 19951130 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-434509 A 19950504 |
| | AU 9851819 | A1 | 19980611 | US 1995-512861 A 19950807
US 1995-541365 A 19951005
WO 1995-US15516W 19951122
AU 1998-51819 19980112 |
| | AU 729657 | B2 | 20010208 | |
| | AU 9939188 | A1 | 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| FAN | 1997:772270 PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | us 5693535 | Α | 19971202 | US 1994-271880 19940707
US 1992-882886 B219920514
US 1993-103423 B219930806 |
| | EP 716693
R: AT, BE, | | 19960619
, DK, ES, | EP 1994-922766 19940804
FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
US 1993-103423 A 19930806 |
| | JP 09501318 | Т2 | 19970210 | US 1994-271880 A 19940707
WO 1994-US8613 W 19940804
JP 1994-506461 19940804
US 1993-103423 A 19930806
US 1994-271880 A 19940707 |
| | us 5972704 | A | 19991026 | WO 1994-US8613 W 19940804
US 1997-910408 19970813
US 1992-882886 A219920514
US 1993-103423 B219930806 |
| | AU 9851819 | A1 | 19980611 | US 1994-271880 A119940707
AU 1998-51819 19980112 |

| 0995 | 1006.3 | | Page 133 | |
|------|-----------------------|--------------------------------------|----------|---|
| | AU 729657 | B2 | 20010208 | |
| | AU 9898253 | A1. | 19990304 | US 1996-623891 A 19960325
AU 1998-98253 19981231
US 1993-103423 A 19930806
US 1994-271880 A 19940707
AU 1994-73755 A319940801 |
| | US 6159692 | А | 20001212 | US 1999-249215 19990212
US 1992-882886 B219920514
US 1993-103423 B219930806
US 1994-271880 A119940707 |
| | AU 9939188 | A1 | 19990916 | US 1997-910408 A119970812
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| FAN | 1998:94599 PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | US 5714383 | А | 19980203 | US 1994-363233 19941223
US 1992-882822 Al19920514 |
| | CA 2183992 | AA | 19950831 | US 1994-193922 B219940207 CA 1995-2183992 19950223 US 1994-201109 A 19940223 US 1994-218934 A 19940329 US 1994-22795 A 19940404 US 1994-224483 A 19940407 US 1994-227958 A 19940415 US 1994-228041 A 19940415 US 1994-228041 A 19940518 US 1994-271280 A 19940518 US 1994-271280 A 19940815 US 1994-291433 A 19940815 US 1994-291433 A 19940816 US 1994-292620 A 19940817 US 1994-293520 A 19940819 US 1994-300000 A 19940902 US 1994-300000 A 19940902 US 1994-311486 A 19940923 US 1994-311749 A 19940923 US 1994-311749 A 19940923 |
| | | A2
A3
CA, JP, KR
BE, CH, DE | | US 1994-314397 A 19940928 US 1994-316771 A 19941003 US 1994-319492 A 19941007 US 1994-321993 A 19941011 US 1994-337608 19941110 US 1994-345516 19941128 US 1994-357577 19941216 US 1994-363233 19941223 US 1995-380734 19950130 WO 1995-IB156 19950223 C, GB, GR, IE, IT, LU, MC, NL, PT, SE US 1994-201109 A 19940223 US 1994-218934 A 19940329 US 1994-22795 A 19940404 US 1994-224483 A 19940407 US 1994-227958 A 19940415 US 1994-228041 A 19940415 US 1994-228041 A 19940518 |

```
US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847 19941104
                                      US 1994-337608
                                                      19941110
                                      US 1994-345516
                                                     19941128
                                      US 1994-357577
                                                     19941216
                                      US 1994-363233
                                                      19941223
                                      US 1995-380734
                                                      19950130
EP 746614
                  Α1
                       19961211
                                      EP 1995-909920
                                                      19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                      WO 1995-IB156 W 19950223
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-228041 A 19940415
                                      US 1994-227958 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993
                                                      19941011
                                      US 1994-334847
                                                       19941104
                                                      19941110
                                      US 1994-337608
                                      US 1994-345516
                                                       19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                       19941223
                                      US 1995-380734
                                                       19950130
JP 09509323
                  T2
                       19970922
                                      JP 1995-522236
                                                       19950223
                                      WO 1995-IB156 W 19950223
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
```

```
US 1994-291932 A 19940815
                                       US 1994-291433 A 19940816
                                       US 1994-292620 A 19940817
                                       US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                       US 1994-311486 A 19940923
                                       US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847 A 19941104
                                      US 1994-337608
                                                      19941110
                                      US 1994-345516
                                                       19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                      19941223
                                      US 1995-380734
                                                      19950130
EP 1260586
                  A2
                       20021127
                                      EP 2002-13004
                                                        19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847 A 19941104
                                      US 1994-337608 A 19941110
                                      US 1994-345516 A 19941128
                                      US 1994-357577 A 19941216
                                      US 1994-363233 A 19941223
                                      US 1995-380734 A 19950130
                                      EP 1995~909920 A319950223
AU 9851819
                  A1
                       19980611
                                      AU 1998-51819
                                                       19980112
AU 729657
                       20010208
                  B2
                                      US 1996-623891 A 19960325
AU 9939188
                  A1
                       19990916
                                      AU 1999-39188 19990713
                                      AU 1995-26422 A319950518
AU 9947567
                  A1
                       19991104
                                      AU 1999-47567
                                                        19990913
AU 737017
                  B2
                       20010809
                                      AU 1996-61744 A319960603
                                      US 1995-475460 A 19950607
                                      US 1994-292620 A 19940817
                                      US 1995-483715 A 19950607
```

| FAN | 1998:493198 | | | US 1994-293520 A 19940819 US 1995-484607 A 19950607 US 1994-300000 A 19940902 US 1994-311486 A 19940923 US 1994-311749 A 19940923 US 1994-314397 A 19940928 US 1994-316771 A 19941003 US 1994-316771 A 19941007 US 1994-321993 A 19941011 US 1994-334847 A 19941104 US 1994-337608 A 19941110 US 1994-345516 A 19941128 US 1994-357577 A 19941216 US 1994-363233 A 19941223 US 1995-380734 19950130 |
|-----|--------------------------|----------|----------|--|
| | PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | US 5783425 | Α | 19980721 | US 1994-357577 19941216
US 1993-143832 B219931027 |
| | CA 2174339 | AA | 19950504 | CA 1994-2174339 19941024
US 1993-143832 A 19931027 |
| | AT 174600 | E | 19990115 | AT 1994-932003 19941024
US 1993-143832 A 19931027 |
| | ES 2127948 | Т3 | 19990501 | ES 1994-932003 19941024
US 1993-143832 A 19931027 |
| | CA 2183992 WO 9523225 | AA
A2 | 19950831 | CA 1995-2183992 19950223 US 1994-201109 A 19940223 US 1994-218934 A 19940329 US 1994-22795 A 19940404 US 1994-224483 A 19940407 US 1994-227958 A 19940415 US 1994-228041 A 19940415 US 1994-245736 A 19940518 US 1994-271280 A 19940706 US 1994-271280 A 19940706 US 1994-291932 A 19940815 US 1994-291433 A 19940816 US 1994-292620 A 19940817 US 1994-293520 A 19940817 US 1994-303039 A 19940902 US 1994-311486 A 19940902 US 1994-311486 A 19940923 US 1994-314397 A 19940923 US 1994-314397 A 19940923 US 1994-314397 A 19940923 US 1994-314397 A 19941003 US 1994-314397 A 19941003 US 1994-314397 A 19941003 US 1994-316771 A 19941003 US 1994-337608 19941110 US 1994-337608 19941110 US 1994-345516 19941128 US 1994-363233 19941223 US 1995-380734 19950130 WO 1995-IB156 19950223 |
| | WO 9523225
W: AU, CA, | A3 | 19960201 | |

```
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847
                                                      19941104
                                      US 1994-337608
                                                       19941110
                                      US 1994-345516
                                                      19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                      19941223
                                      US 1995-380734
                                                       19950130
EP 746614
                  A1
                       19961211
                                      EP 1995-909920
                                                      19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                      WO 1995-IB156 W 19950223
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-228041 A 19940415
                                      US 1994-227958 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 19941011
                                      US 1994-334847
                                                       19941104
                                      US 1994-337608
                                                       19941110
                                      US 1994-345516
                                                       19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                       19941223
                                      US 1995-380734
                                                       19950130
                       19970922
                                      JP 1995-522236
JP 09509323
                  T2
                                                       19950223
```

```
WO 1995-IB156 W 19950223
                                       US 1994-201109 A 19940223
                                       US 1994-218934 A 19940329
                                       US 1994-222795 A 19940404
                                       US 1994-227958 A 19940415
                                       US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                       US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847 A 19941104
                                      US 1994-337608
                                                      19941110
                                      US 1994-345516
                                                        19941128
                                      US 1994-357577
                                                        19941216
                                      US 1994-363233
                                                       19941223
                                      US 1995-380734
                                                        19950130
EP 1260586
                  A2
                       20021127
                                      EP 2002-13004
                                                        19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994~311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847 A 19941104
                                      US 1994-337608 A 19941110
                                      US 1994-345516 A 19941128
                                      US 1994-357577 A 19941216
                                      US 1994-363233 A 19941223
                                      US 1995-380734 A 19950130
                                      EP 1995-909920 A319950223
                                      AU 1998-51819
AU 9851819
                  Α1
                       19980611
                                                        19980112
AU 729657
                  B2
                       20010208
                                      US 1996-623891 A 19960325
```

| 0995100 | 6.3 | | Page 139 | |
|---------|------------------------|-----------------|----------------------|--|
| US | 6093555 | Α | 20000725 | US 1998-21695 19980210
US 1993-143832 B219931027 |
| AU | 9939188 | A1 | 19990916 | US 1994-357577 A119941216
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| | 9947567
737017 | A1
B2 | 19991104
20010809 | AU 1999-47567 19990913 |
| | | | | AU 1996-61744 A319960603
US 1995-475460 A 19950607
US 1994-292620 A 19940817 |
| | | | | US 1994-292020 A 19940017
US 1995-483715 A 19950607
US 1994-293520 A 19940819 |
| | | | | US 1995-484607 A 19950607
US 1994-300000 A 19940902 |
| | | | | US 1994-303039 A 19940908
US 1994-311486 A 19940923 |
| | | | | US 1994-311749 A 19940923
US 1994-314397 A 19940928
US 1994-316771 A 19941003 |
| | | | | US 1994-319492 A 19941007
US 1994-321993 A 19941011 |
| | | | | US 1994-334847 A 19941104
US 1994-337608 A 19941110 |
| | | | | US 1994-345516 A 19941128
US 1994-357577 A 19941216
US 1994-363233 A 19941223 |
| US | 6379954 | B1 | 20020430 | US 1994-303233 A 19941223
US 1995-380734 19950130
US 2000-494722 20000131 |
| | | | | US 1993-143832 B219931027
US 1994-357577 A119941216 |
| | 98:527418
TENT NO. | KIND | DATE | US 1998-21695 A119980210 APPLICATION NO. DATE |
| | | | 19980730 | WO 1998-US1017 19980120 |
| WC | W: AU, C | A3
A, JP, MX | | ET ED CD CD TE TE TU MC NU DE CE |
| TTC | RW: AT, E | е, сн, ре
А | 20000815 | FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
US 1997-37658P P 19970123
US 1997-998099 19971224 |
| US | 0103690 | A | 20000013 | US 1994-245466 B219940518
US 1995-373124 A219950113 |
| ΑÜ | 9851819 | A1 | 19980611 | US 1997-37658P P 19970123
AU 1998-51819 19980112 |
| | 729657 | В2 | 20010208 | US 1996-623891 A 19960325 |
| AU | 9860315 | A1 | 19980818 | AU 1998-60315 19980120
US 1997-37658P P 19970123 |
| AU | 9939188 | A1 | 19990916 | WO 1998-US1017 W 19980120
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| | 998:543151
TENT NO. | KIND | DATE | APPLICATION NO. DATE |
| | 9833893
9833893 | A2
A3 | 19980806
19981210 | WO 1998-US730 19980114 |
| | | A, JP, MX | | |

```
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                        US 1997-36476P P 19970131
                                        US 1997-985162 A 19971204
    US 6057156
                   Α
                          20000502
                                        US 1997-985162 19971204
                                        US 1997-36476P P 19970131
               A1
    AU 9851819
                          19980611
                                        AU 1998-51819
                                                      19980112
                     B2
    AU 729657
                          20010208
                                        US 1996-623891 A 19960325
               A1
B2
    AU 9860255
                          19980825
                                        AU 1998-60255 19980114
                     В2
    AU 748176
                          20020530
                                        US 1997-36476P P 19970131
                                        US 1997-985162 A 19971204
                                        WO 1998-US730 W 19980114
    EP 986637 A2 20000322 EP 1998-903498 19980114
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                                        US 1997-36476P P 19970131
                                        US 1997-985162 A 19971204
                                        WO 1998-US730 W 19980114
    JP 2001511003 T2
                          20010807
                                        JP 1998-532913 19980114
                                        US 1997-36476P P 19970131
                                        US 1997-985162 A 19971204
                                        WO 1998-US730 W 19980114
    AU 9939188
                   A1
                         19990916
                                       AU 1999-39188 19990713
                                        AU 1995-26422 A319950518
    MX 9907142
                   Α
                          20000831
                                       MX 1999-7142 19990802
                                        US 1997-36476P P 19970131
                                        US 1997-985162 A 19971204
                                        WO 1998-US730 W 19980114
   1998:618332
FAN
    PATENT NO.
                    KIND DATE
                                      APPLICATION NO. DATE
                    ____
                                       -----
                A 19980922
PΤ
    US 5811300
                                       US 1994-311486 19940923
                                       US 1992-989849 B219921207
                                       US 1993-8895 B219930119
              A2 19970730
A3 19970827
    EP 786522
                                      EP 1997-101534 19930702
    EP 786522
        R: AT, CH, DE, ES, FR, GB, IT, LI, SE
                                        US 1992-916763 A 19920717
                                        US 1992-987132 A 19921207
                                        US 1992-989848 A 19921207
                                        US 1992-989849 A 19921207
                                       US 1993-8895 A 19930119
                                       EP 1993-918144 A319930702
                   A2
    EP 1251170
EP 1251170
                         20021023
                                       EP 2002-5642
                                                      19930702
                    A3 20021030
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                       US 1992-916763 A 19920717
                                        US 1992-987132 A 19921207
                                        US 1992-989848 A 19921207
                                        US 1992-989849 A 19921207
                                        US 1993-8895 A 19930119
                                        EP 1993-918144 A319930702
                AA 19950831
    CA 2183992
                                        CA 1995-2183992 19950223
                                        US 1994-201109 A 19940223
                                        US 1994-218934 A 19940329
                                        US 1994-222795 A 19940404
```

```
US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847
                                                     19941104
                                      US 1994-337608
                                                      19941110
                                      US 1994-345516
                                                      19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                      19941223
                                      US 1995-380734
                                                      19950130
WO 9523225
                 A2
                       19950831
                                      WO 1995-IB156
                                                       19950223
WO 9523225
                 A3
                       19960201
    W: AU, CA, JP, KR, MX
    RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847
                                                     19941104
                                      US 1994-337608
                                                      19941110
                                      US 1994-345516
                                                      19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                       19941223
                                      US 1995-380734
                                                       19950130
EP 746614
                 A1
                                      EP 1995-909920
                       19961211
                                                       19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                      WO 1995-IB156 W 19950223
                                      US 1994-201109 A 19940223
```

```
US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-228041 A 19940415
                                      US 1994-227958 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 19941011
                                      US 1994-334847
                                                       19941104
                                      US 1994-337608
                                                      19941110
                                      US 1994-345516
                                                      19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                      19941223
                                      US 1995-380734
                                                      19950130
JP 09509323
                  T2
                       19970922
                                      JP 1995-522236
                                                       19950223
                                      WO 1995-IB156 W 19950223
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847 A 19941104
                                      US 1994-337608
                                                      19941110
                                      US 1994-345516
                                                      19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                       19941223
                                      US 1995-380734
                                                       19950130
EP 1260586
                  A2
                       20021127
                                      EP 2002-13004
                                                       19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
```

FAN

ΡI

| | 98:747594
FENT NO. | KIND | DATE | US 1994-319492 A 19941007 US 1994-321993 A 19941011 US 1994-334847 A 19941104 US 1994-337608 A 19941110 US 1994-345516 A 19941128 US 1994-357577 A 19941216 US 1994-363233 A 19941223 US 1995-380734 19950130 APPLICATION NO. DATE |
|------|-----------------------|--|---|---|
| 199 | 98:747594 | | | US 1994-319492 A 19941007
US 1994-321993 A 19941011
US 1994-334847 A 19941104
US 1994-337608 A 19941110
US 1994-345516 A 19941128
US 1994-357577 A 19941216
US 1994-363233 A 19941223 |
| | | | | US 1994-319492 A 19941007
US 1994-321993 A 19941011 |
| | | | | US 1994-319492 A 19941007 |
| | | | | 09 1334-310111 W 13341003 |
| | | | | US 1994-316771 A 19941003 |
| | | | | US 1994-314397 A 19940928 |
| | | | | US 1994-311749 A 19940923 |
| | | | | US 1994-303039 A 19940908
US 1994-311486 A 19940923 |
| | | | | US 1994-300000 A 19940902 |
| | | | | US 1995-484607 A 19950607 |
| | | | | US 1994-293520 A 19940819 |
| | | | | US 1995-483715 A 19950607 |
| | | | | US 1995-475460 A 19950607
US 1994-292620 A 19940817 |
| | | | | AU 1996-61744 A319960603
US 1995-475460 A 19950607 |
| AU | 737017 | B2 | 20010809 | NII 1006 61744 NO10060600 |
| | | A1 | 19991104 | AU 1999-47567 19990913 |
| 4-10 | JJJJ100 | 111 | 1000010 | AU 1995-26422 A319950518 |
| ΔΤΤ | 9939188 | Δ1 | 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713 |
| AU | 729657 | B2 | 20010208 | Hg 1006 622001 7 10060205 |
| | | A1 | 19980611 | AU 1998-51819 19980112 |
| | | | | US 1993-8895 B119930119 |
| 55 | 2320130 | * • | | US 1992-989849 B219921207 |
| US | 5616490 | Α | 19970401 | US 1995-434503 19950504 |
| | | | | US 1995-380734 A 19950130
EP 1995-909920 A319950223 |
| | | | | US 1994-363233 A 19941223 |
| | | | | US 1994-357577 A 19941216 |
| | | | | US 1994-345516 A 19941128 |
| | | | | US 1994-337608 A 19941110 |
| | | | | US 1994-321993 A 19941011
US 1994-334847 A 19941104 |
| | | | | US 1994-319492 A 19941007
US 1994-321993 A 19941011 |
| | | | | US 1994-316771 A 19941003 |
| | | | | US 1994-314397 A 19940928 |
| | | | | US 1994-311749 A 19940923 |
| | | | | US 1994-311486 A 19940923 |
| | | | | US 1994-303039 A 19940908 |
| | | | | US 1994-293520 A 19940819
US 1994-300000 A 19940902 |
| | | | | US 1994-292620 A 19940817 |
| | | | | US 1994-291433 A 19940816 |
| | | | | US 1994-291932 A 19940815 |
| | | | | US 1994-271280 A 19940706 |
| | | | | US 1994-245736 A 19940518 |
| | | | | US 1994-228041 A 19940415 |
| | | | | US 1994-227958 A 19940415 |
| | AU
AU
AU | US 5616490 AU 9851819 AU 729657 AU 9939188 AU 9947567 AU 737017 | AU 9851819 A1
AU 729657 B2
AU 9939188 A1
AU 9947567 A1 | AU 9851819 A1 19980611
AU 729657 B2 20010208
AU 9939188 A1 19990916
AU 9947567 A1 19991104 |

```
WO 9850530
                        19990729
                   A3
    W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
        DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
        KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
        NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
    UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
        CM, GA, GN, ML, MR, NE, SN, TD, TG
                                        US 1997-46059P P 19970509
                                        US 1997-49002P P 19970609
                                        US 1997-51718P P 19970703
                                        US 1997-56808P P 19970822
                                        US 1997-61321P P 19971002
                                        US 1997-61324P P 19971002
                                        US 1997-64866P P 19971105
                                        US 1997-68212P P 19971219
AU 9851819 A1 19980611
                                        AU 1998-51819
                                                          19980112
AU 729657
                   B2
                        20010208
                                        US 1996-623891 A 19960325
AU 9872905
                        19981127
                                        AU 1998-72905 19980505
                 A1
AU 749561
                   B2
                        20020627
                                        US 1997-46059P P 19970509
                                        US 1997-49002P P 19970609
                                        US 1997-51718P P 19970703
                                        US 1997-56808P P 19970822
                                        US 1997-61321P P 19971002
                                        US 1997-61324P P 19971002
                                        US 1997-64866P P 19971105
                                        US 1997-68212P P 19971219
                                        WO 1998-US9249 W 19980505
                                        EP 1998-920299 19980505
EP 980424
                        20000223
                   A2
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, FI
                                        US 1997-46059P P 19970509
                                        US 1997-49002P P 19970609
                                        US 1997-51718P P 19970703
                                        US 1997-56808P P 19970822
                                        US 1997-61321P P 19971002
                                        US 1997-61324P P 19971002
                                        US 1997-64866P P 19971105
                                        US 1997-68212P P 19971219
                                        WO 1998-US9249 W 19980505
                                        JP 1998-548448 19980505
JP 2001525667
                   T2
                        20011211
                                        US 1997-46059P P 19970509
                                        US 1997-49002P P 19970609
                                        US 1997-51718P P 19970703
                                        US 1997-56808P P 19970822
                                        US 1997-61321P P 19971002
                                        US 1997-61324P P 19971002
                                        US 1997-64866P P 19971105
                                        US 1997-68212P P 19971219
                                        WO 1998-US9249 W 19980505
                        20030625
                                        EP 2003-2270
EP 1321521
                  A1
                                                      19980505
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, FI, CY
                                        US 1997-46059P P 19970509
```

| | | | | US 1997-49002P P 19970609
US 1997-51718P P 19970703
US 1997-56808P P 19970822
US 1997-61321P P 19971002
US 1997-61324P P 19971002
US 1997-64866P P 19971105
US 1997-68212P P 19971219 | |
|-----|--|----------|----------------------|---|----|
| | US 6054576 | А | 20000425 | EP 1998-920299 A319981112
US 1998-164964 19981001 | |
| | US 6162909 | A | 20001219 | US 1997-61321P P 19971002 | |
| | AU 9939188 | A1 | 19990916 | AU 1995-26422 A319950518 | |
| | us 6303773 | B1 | 20011016 | US 2000-644962 20000823
US 1997-61321P P 19971002
US 1998-164964 All9981001
US 1999-326154 All9990604 | |
| | US 2002028919 | A1 | 20020307 | | |
| | US 6489465 | B2 | 20021203 | | |
| | | | | US 1997-56808P P 19970822
US 1998-135964 A119980818 | |
| | US 2002103366 | AI | 20020801 | US 1997-61321P P 19971002
US 1998-164964 Al19981001
US 1999-326154 Al19990604
US 2000-644962 Al20000823 | |
| | US 2003125291 | A1 | 20030703 | | |
| FAN | 1998:752200 PATENT NO. | KIND | DATE | APPLICATION NO. DATE | |
| PI | US 5837542 | Α | 19981117 | US 1994-292620 19940817
US 1992-989849 B219921207
US 1993-8895 B219930119 | |
| | | A3 | 19970730
19970827 | EP 1997-101534 19930702 | |
| | | DE, ES | | IT, LI, SE US 1992-916763 A 19920717 US 1992-987132 A 19921207 US 1992-989848 A 19921207 US 1992-989849 A 19921207 US 1993-8895 A 19930119 EP 1993-918144 A319930702 | |
| | EP 1251170
EP 1251170
R: AT, BE, | A2
A3 | 20021023
20021030 | EP 2002-5642 19930702
FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, I | F. |
| | A. AI, DE, | OH, DE | , 511, 113, | US 1992-916763 A 19920717 US 1992-987132 A 19921207 US 1992-989848 A 19921207 US 1992-989849 A 19921207 US 1993-8895 A 19930119 EP 1993-918144 A319930702 | _ |
| | CA 2183992 | AA | 19950831 | CA 1995-2183992 19950223 | |

US 1994-201109 A 19940223

```
US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847
                                                      19941104
                                      US 1994-337608
                                                       19941110
                                      US 1994-345516
                                                      19941128
                                      US 1994-357577
                                                       19941216
                                      US 1994-363233
                                                       19941223
                                      US 1995-380734
                                                       19950130
WO 9523225
                  A2
                       19950831
                                      WO 1995-IB156
                                                       19950223
WO 9523225
                  A3
                       19960201
   W: AU, CA, JP, KR, MX
    RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-227958 A 19940415
                                      US 1994-228041 A 19940415
                                      US 1994-245736 A 19940518
                                      US 1994-271280 A 19940706
                                      US 1994-291932 A 19940815
                                      US 1994-291433 A 19940816
                                      US 1994-292620 A 19940817
                                      US 1994-293520 A 19940819
                                      US 1994-300000 A 19940902
                                      US 1994-303039 A 19940908
                                      US 1994-311486 A 19940923
                                      US 1994-311749 A 19940923
                                      US 1994-314397 A 19940928
                                      US 1994-316771 A 19941003
                                      US 1994-319492 A 19941007
                                      US 1994-321993 A 19941011
                                      US 1994-334847
                                                        19941104
                                      US 1994-337608
                                                        19941110
                                      US 1994-345516
                                                        19941128
                                      US 1994-357577
                                                        19941216
                                                        19941223
                                      US 1994-363233
                                      US 1995-380734
                                                        19950130
                       19961211
                                      EP 1995-909920
                                                        19950223
                 A1
EP 746614
```

```
AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                       WO 1995-IB156 W 19950223
                                       US 1994-201109 A 19940223
                                       US 1994-218934 A 19940329
                                       US 1994-222795 A 19940404
                                       US 1994-224483 A 19940407
                                       US 1994-228041 A 19940415
                                       US 1994-227958 A 19940415
                                       US 1994-245736 A 19940518
                                       US 1994-271280 A 19940706
                                       US 1994-291932 A 19940815
                                       US 1994-291433 A 19940816
                                       US 1994-292620 A 19940817
                                       US 1994-293520 A 19940819
                                       US 1994-300000 A 19940902
                                       US 1994-303039 A 19940908
                                       US 1994-311486 A 19940923
                                       US 1994-311749 A 19940923
                                       US 1994-314397 A 19940928
                                       US 1994-316771 A 19941003
                                       US 1994-319492 A 19941007
                                       US 1994-321993
                                                        19941011
                                       US 1994-334847
                                                        19941104
                                       US 1994-337608
                                                        19941110
                                       US 1994-345516
                                                        19941128
                                       US 1994-357577
                                                        19941216
                                       US 1994-363233
                                                        19941223
                                       US 1995-380734
                                                        19950130
JP 09509323
                  T2
                        19970922
                                       JP 1995-522236
                                                        19950223
                                       WO 1995-IB156 W 19950223
                                       US 1994-201109 A 19940223
                                       US 1994-218934 A 19940329
                                       US 1994-222795 A 19940404
                                       US 1994-227958 A 19940415
                                       US 1994-228041 A 19940415
                                       US 1994-245736 A 19940518
                                       US 1994-271280 A 19940706
                                       US 1994-291932 A 19940815
                                       US 1994-291433 A 19940816
                                       US 1994-292620 A 19940817
                                       US 1994-293520 A 19940819
                                       US 1994-300000 A 19940902
                                       US 1994-311486 A 19940923
                                       US 1994-311749 A 19940923
                                       US 1994-314397 A 19940928
                                       US 1994-316771 A 19941003
                                       US 1994-319492 A 19941007
                                       US 1994-321993 A 19941011
                                       US 1994-334847 A 19941104
                                       US 1994-337608
                                                        19941110
                                       US 1994-345516
                                                        19941128
                                       US 1994-357577
                                                        19941216
                                       US 1994-363233
                                                        19941223
                                       US 1995-380734
                                                        19950130
EP 1260586
                  A2
                       20021127
                                      EP 2002-13004
                                                        19950223
   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                      US 1994-201109 A 19940223
```

| | | | | US 1994-218934 A 19940329 |
|----|---------|------------|----------|---------------------------|
| | | | | US 1994-222795 A 19940404 |
| | | | | US 1994-224483 A 19940407 |
| | | | | US 1994-227958 A 19940415 |
| | | | | US 1994-228041 A 19940415 |
| | | | | US 1994-245736 A 19940518 |
| | | | | US 1994-271280 A 19940706 |
| | | | | US 1994-291932 A 19940815 |
| | | | | US 1994-291433 A 19940816 |
| | | | | US 1994-292620 A 19940817 |
| | | | | US 1994-293520 A 19940819 |
| | | | | US 1994-300000 A 19940902 |
| | | | | US 1994-303039 A 19940908 |
| | | | | US 1994-303039 A 19940908 |
| | | | | |
| | | | | US 1994-311749 A 19940923 |
| | | | | US 1994-314397 A 19940928 |
| | | | | US 1994-316771 A 19941003 |
| | | | | US 1994-319492 A 19941007 |
| | | | | US 1994-321993 A 19941011 |
| | | | | US 1994-334847 A 19941104 |
| | | | | US 1994-337608 A 19941110 |
| | | | | US 1994-345516 A 19941128 |
| | | | | US 1994-357577 A 19941216 |
| | | | | US 1994-363233 A 19941223 |
| | | | | US 1995-380734 A 19950130 |
| | | | | EP 1995-909920 A319950223 |
| US | 5616490 | Α | 19970401 | US 1995-434503 19950504 |
| | | | | US 1992-989849 B219921207 |
| | | | | US 1993-8895 B119930119 |
| | 9851819 | A 1 | 19980611 | AU 1998-51819 19980112 |
| AU | 729657 | B2 | 20010208 | |
| | | | | US 1996-623891 A 19960325 |
| US | 6132967 | A | 20001017 | US 1998-71845 19980501 |
| | | | | US 1992-989849 B219921207 |
| | | | | US 1993-8895 B219930119 |
| | | | | US 1994-292620 A119940817 |
| AU | 9939188 | A 1 | 19990916 | AU 1999-39188 19990713 |
| | | | | AU 1995-26422 A319950518 |
| | 9947567 | A 1 | 19991104 | AU 1999-47567 19990913 |
| ΑU | 737017 | B2 | 20010809 | |
| | | | | AU 1996-61744 A319960603 |
| | | | | US 1995-475460 A 19950607 |
| | | | | US 1994-292620 A 19940817 |
| | | | | US 1995-483715 A 19950607 |
| | | | | US 1994-293520 A 19940819 |
| | | | | US 1995-484607 A 19950607 |
| | | | | US 1994-300000 A 19940902 |
| | | | | US 1994-303039 A 19940908 |
| | | | | US 1994-311486 A 19940923 |
| | | | | US 1994-311749 A 19940923 |
| | | | | US 1994-314397 A 19940928 |
| | | | | US 1994-316771 A 19941003 |
| | | | | US 1994-319492 A 19941007 |
| | | | | US 1994-321993 A 19941011 |
| | | | | US 1994-334847 A 19941104 |
| | | | | US 1994-337608 A 19941110 |
| | | | | US 1994-345516 A 19941128 |
| | | | | OD TOOK OFFORD W IDSHITTO |

| | US 6436644 | В1 | 20020820 | US 1994-357577 A 19941216 US 1994-363233 A 19941223 US 1995-380734 19950130 US 2000-589628 20000607 US 1992-989849 B219921207 US 1993-8895 B219930119 US 1994-292620 A119940817 US 1998-71845 A119980501 |
|-----|---------------------------------------|---------|----------|--|
| FAN | 1999:147320 PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | US 5877021
AU 9851819
AU 729657 | A
Al | | US 1996-585684 19960112
AU 1998-51819 19980112 |
| | US 6194150 | B1 | 20010227 | US 1996-623891 A 19960325
US 1998-38073 19980311
US 1995-951P P 19950707
US 1996-585684 A119960112 |
| | AU 9939188 | A1 | 19990916 | |
| | US 2003207837 | A1 | 20031106 | US 2003-440850 20030519
US 1995-951P P 19950707
US 1996-585684 Al19960112
US 1998-38073 A219980311
US 2000-650012 B120000828 |
| FAN | 1999:224215 PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | US 5891683 | | 19990406 | US 1994-363253 19941223
US 1993-116177 B219930902
US 1993-152481 B219931112 |
| | CA 2169645 | AA | 19950309 | US 1994-233748 B219940419
CA 1994-2169645 19940819
US 1993-116177 A 19930902
US 1993-152481 A 19931112
US 1994-233748 A 19940419 |
| | EP 1253199
R: AT, BE, | | | EP 2002-9782 19940819 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE US 1993-116177 A 19930902 US 1993-152481 A 19931112 US 1994-233748 A 19940419 |
| | ES 2186690 | Т3 | 20030516 | EP 1994-925939 A319940819
ES 1994-925939 19940819
US 1993-116177 A 19930902
US 1993-152481 A 19931112
US 1994-233748 A 19940419 |
| | CA 2207593 | AA | 19960620 | CA 1995-2207593 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-512861 A 19950807 US 1995-541365 A 19951005 |
| | WO 9618736 | A2 | 19960620 | WO 1995-US15516 19951122 |

```
19960919
WO 9618736
                  А3
    W: AU, CA, JP, MX
    RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                      US 1994-354920 A 19941213
                                      US 1994-363253 A 19941223
                                      US 1994-363254 A 19941223
                                      US 1995-390850 A 19950217
                                      US 1995-426124 A 19950420
                                      US 1995-432874 A 19950502
                                      US 1995-434509 A 19950504
                                      US 1995-512861 A 19950807
                                      US 1995-541365 A 19951005
                                                      19951122
                       19971008
                                      EP 1995-942944
EP 799313
                  A2
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                      US 1994-354920 A 19941213
                                      US 1994-363253 A 19941223
                                      US 1994-363254 A 19941223
                                      US 1995-390850 A 19950217
                                      US 1995-426124 A 19950420
                                      US 1995-432874 A 19950502
                                      US 1995-434509 A 19950504
                                      US 1995-951P P 19950707
                                      US 1995-974P
                                                    P 19950707
                                      US 1995-512861 A 19950807
                                      US 1995-541365 A 19951005
                                      WO 1995-US15516W 19951122
JP 2001526521
                  T2
                       20011218
                                      JP 1996-519035 19951122
                                      US 1994-354920 A 19941213
                                      US 1994-363253 A 19941223
                                      US 1994-363254 A 19941223
                                      US 1995-390850 A 19950217
                                      US 1995-426124 A 19950420
                                      US 1995-432874 A 19950502
                                      US 1995-434509 A 19950504
                                                    P 19950707
                                      US 1995-951P
                                                     P 19950707
                                      US 1995-974P
                                      US 1995-541365 A 19951005
                                      WO 1995-US15516W 19951122
AU 9644120
                A1
                       19960703
                                      AU 1996-44120
                                                       19951130
                                      US 1994-354920 A 19941213
                                      US 1994-363253 A 19941223
                                      US 1994-363254 A 19941223
                                      US 1995-390850 A 19950217
                                      US 1995-426124 A 19950420
                                      US 1995-432874 A 19950502
                                      US 1995-434509 A 19950504
                                      US 1995-512861 A 19950807
                                      US 1995-541365 A 19951005
                                      WO 1995-US15516W 19951122
                                      AU 1998-51819
                                                        19980112
                  Α1
                       19980611
AU 9851819
                       20010208
AU 729657
                  В2
                                      US 1996-623891 A 19960325
AU 9881856
                  A1
                       19981015
                                      AU 1998-81856 19980824
AU 730934
                  B2
                       20010322
                                      US 1993-116177 A 19930902
US 6117657
                  Α
                       20000912
                                      US 1998-182975 19981029
                                      US 1993-116177 B219930902
```

| | 7V 0020100 | 2.1 | 10000016 | US 1993-152481 B219931112
US 1994-233748 B219940419
US 1994-363253 A119941223 |
|-----|--------------------------|--------|----------------------|--|
| | AU 9939188 | A1 | 19990916 | AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| | US 6362323 | В1 | 20020326 | US 2000-628959 20000731 |
| | | | | US 1993-116177 B219930902 |
| | | | | US 1993-152481 B219931112 |
| | | | | US 1994-233748 B219940419
US 1994-363253 A119941223 |
| | | | | US 1994-182975 A119941223 |
| | US 2002193579 | A1 | 20021219 | US 2002-41614 20020108 |
| | US 6555668 | B2 | 20030429 | |
| | | | | US 1993-116177 B219930902 |
| | | | | US 1993-152481 B219931112 |
| | | | | US 1994-233748 B219940419
US 1994-363253 A119941223 |
| | | | | US 1994-363233 A119941223
US 1998-182975 A119981029 |
| | | | | US 2000-628959 A120000731 |
| | US 2003165969 | A1 | 20030904 | US 2003-390206 20030317 |
| | | | | US 1993-116177 B219930902 |
| | | | | US 1993-152481 B219931112 |
| | | | | US 1994-233748 B219940419 |
| | | | | US 1994-363253 A119941223
US 1998-182975 A119981029 |
| | | | | US 2000-628959 A120000731 |
| | | | | US 2002-41614 A120020108 |
| FAN | 1999:224216 PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| ΡI | US 5891684 | A | 19990406 | US 1994-363254 19941223 |
| | | | | US 1992-963322 B219921015 |
| | | | | US 1993-149210 B219931108 |
| | US 5672511 | A | 19970930 | US 1995-437114 19950505 |
| | | | | US 1992-963322 B219921015 |
| | | | | US 1993-149210 B219931108
US 1994-363254 A319941223 |
| | US 5767263 | A | 19980616 | US 1995-435521 19950505 |
| | | | | US 1992-963322 B219921015 |
| | | | | |
| | | | | US 1993-149210 B219931108 |
| | 777 F070000 | _ | 1000000 | US 1993-149210 B219931108
US 1994-363254 A319941223 |
| | US 5879938 | A | 19990309 | US 1993-149210 B219931108
US 1994-363254 A319941223
US 1995-435398 19950505 |
| | US 5879938 | Α | 19990309 | US 1993-149210 B219931108
US 1994-363254 A319941223
US 1995-435398 19950505
US 1992-963322 B219921015 |
| | US 5879938 | A | 19990309 | US 1993-149210 B219931108
US 1994-363254 A319941223
US 1995-435398 19950505
US 1992-963322 B219921015
US 1993-149210 A219931108 |
| | US 5879938
US 5672501 | A
A | 19990309
19970930 | US 1993-149210 B219931108
US 1994-363254 A319941223
US 1995-435398 19950505
US 1992-963322 B219921015 |
| | US 5672501 | А | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 |
| | | | | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 |
| | US 5672501 | А | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 US 1994-354920 A 19941213 |
| | US 5672501 | А | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 |
| | US 5672501 | А | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 |
| | US 5672501 | A | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 |
| | US 5672501 | A | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 |
| | US 5672501 | A | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950502 US 1995-432874 A 19950504 |
| | US 5672501 | A | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 US 1994-363254 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950420 US 1995-432874 A 19950502 US 1995-434509 A 19950504 US 1995-512861 A 19950807 |
| | US 5672501 | A | 19970930 | US 1993-149210 B219931108 US 1994-363254 A319941223 US 1995-435398 19950505 US 1992-963322 B219921015 US 1993-149210 A219931108 US 1994-363254 A319941223 US 1995-541365 19951005 US 1994-363254 A219941223 CA 1995-2207593 19951122 US 1994-354920 A 19941213 US 1994-363253 A 19941223 US 1994-363254 A 19941223 US 1995-390850 A 19950217 US 1995-426124 A 19950502 US 1995-432874 A 19950504 |

```
WO 9618736
                       A2
                            19960620
                                          WO 1995-US15516 19951122
     WO 9618736
                       AЗ
                            19960919
         W: AU, CA, JP, MX
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                           US 1994-354920 A 19941213
                                           US 1994-363253 A 19941223
                                           US 1994-363254 A 19941223
                                           US 1995-390850 A 19950217
                                           US 1995-426124 A 19950420
                                           US 1995-432874 A 19950502
                                           US 1995-434509 A 19950504
                                           US 1995-512861 A 19950807
                                           US 1995-541365 A 19951005
     EP 799313
                       A2
                            19971008
                                           EP 1995-942944 19951122
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                           US 1994-354920 A 19941213
                                           US 1994-363253 A 19941223
                                           US 1994-363254 A 19941223
                                           US 1995-390850 A 19950217
                                           US 1995-426124 A 19950420
                                           US 1995-432874 A 19950502
                                           US 1995-434509 A 19950504
                                           US 1995-951P P 19950707
                                           US 1995-974P P 19950707
                                           US 1995-512861 A 19950807
                                           US 1995-541365 A 19951005
                                           WO 1995-US15516W 19951122
     JP 2001526521
                       T2
                            20011218
                                           JP 1996-519035 19951122
                                           US 1994-354920 A 19941213
                                           US 1994-363253 A 19941223
                                           US 1994-363254 A 19941223
                                           US 1995-390850 A 19950217
                                           US 1995-426124 A 19950420
                                           US 1995-432874 A 19950502
                                           US 1995-434509 A 19950504
                                           US 1995-951P P 19950707
                                           US 1995-974P P 19950707
                                           US 1995-541365 A 19951005
                                           WO 1995-US15516W 19951122
     AU 9644120
                      A1
                          19960703
                                           AU 1996-44120 19951130
                                           US 1994-354920 A 19941213
                                           US 1994-363253 A 19941223
                                           US 1994-363254 A 19941223
                                           US 1995-390850 A 19950217
                                           US 1995-426124 A 19950420
                                           US 1995-432874 A 19950502
                                           US 1995-434509 A 19950504
                                           US 1995-512861 A 19950807
                                          US 1995-541365 A 19951005
                                          WO 1995-US15516W 19951122
     AU 9851819
                           19980611
                      A1
                                          AU 1998-51819
                                                          19980112
     AU 729657
                      В2
                           20010208
                                          US 1996-623891 A 19960325
    AU 9939188
                           19990916
                      A1
                                          AU 1999-39188 19990713
                                          AU 1995-26422 A319950518
FAN 1999:316616
     PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
```

| ΡI | US 5902880 | Α | 19990511 | US 1994-337608 19941110 |
|----|--------------------------|-----------|-------------|--|
| | | | | US 1994-293520 B219940819 |
| | CA 2183992 | AA | 19950831 | CA 1995-2183992 19950223 |
| | | | | US 1994-201109 A 19940223 |
| | | | | US 1994-218934 A 19940329 |
| | | | | US 1994-222795 A 19940404 |
| | | | | US 1994-224483 A 19940407 |
| | | | | US 1994-227958 A 19940415 |
| | | | | US 1994-228041 A 19940415 |
| | | | | US 1994-245736 A 19940518 |
| | | | | US 1994-271280 A 19940706 |
| | | | | US 1994-291932 A 19940815 |
| | | | | US 1994-291433 A 19940816 |
| | | | | US 1994-292620 A 19940817 |
| | | | | US 1994-293520 A 19940819 |
| | | | | US 1994-300000 A 19940902 |
| | | | | US 1994-303039 A 19940908 |
| | | | | US 1994-311486 A 19940923 |
| | | | | US 1994-311749 A 19940923 |
| | | | | US 1994-314397 A 19940928 |
| | | | | US 1994-316771 A 19941003 |
| | | | | US 1994-319492 A 19941007 |
| | | | | US 1994-321993 A 19941011 |
| | | | | US 1994-334847 19941104 |
| | | | | US 1994-337608 19941110 |
| | | | | US 1994-345516 19941128 |
| | | | | US 1994-357577 19941216 |
| | | | | US 1994-363233 19941223 |
| | 050000 | | | US 1995-380734 19950130 |
| | WO 9523225
WO 9523225 | A2 | 19950831 | WO 1995-IB156 19950223 |
| | | | | |
| | | , JP, KR, | | |
| | RW: AT, BE | , CH, DE, | DK, ES, FR, | GB, GR, IE, IT, LU, MC, NL, PT, SE |
| | | | | US 1994-201109 A 19940223 |
| | | | | US 1994-218934 A 19940329 |
| | | | | US 1994-222795 A 19940404
US 1994-224483 A 19940407 |
| | | | | US 1994-227958 A 19940407 |
| | | | | US 1994-228041 A 19940415 |
| | | | | US 1994-245736 A 19940518 |
| | | | | US 1994-271280 A 19940706 |
| | | | | US 1994-291932 A 19940815 |
| | | | | US 1994-291433 A 19940816 |
| | | | | US 1994-292620 A 19940817 |
| | | | | US 1994-293520 A 19940819 |
| | | | | US 1994-300000 A 19940902 |
| | | | | US 1994-303039 A 19940908 |
| | | | | US 1994-311486 A 19940923 |
| | | | | US 1994-311749 A 19940923 |
| | | | | US 1994-314397 A 19940928 |
| | | | | US 1994-316771 A 19941003 |
| | | | | US 1994-319492 A 19941007 |
| | | | | US 1994-321993 A 19941011 |
| | | | | US 1994-334847 19941104 |
| | | | | US 1994-337608 19941110 |
| | | | | US 1994-345516 19941128 |
| | | | | |

09951006.3 Page 154

```
US 1994-357577
                                                     19941216
                                      US 1994-363233
                                                     19941223
                                      US 1995-380734
                                                     19950130
EP 746614
                 A1
                       19961211
                                      EP 1995-909920
                                                     19950223
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                      WO 1995-IB156 W 19950223
                                      US 1994-201109 A 19940223
                                      US 1994-218934 A 19940329
                                      US 1994-222795 A 19940404
                                      US 1994-224483 A 19940407
                                      US 1994-228041 A 19940415
                                      US 1994-227958 A 19940415
                                     US 1994-245736 A 19940518
                                     US 1994-271280 A 19940706
                                     US 1994-291932 A 19940815
                                     US 1994-291433 A 19940816
                                     US 1994-292620 A 19940817
                                     US 1994-293520 A 19940819
                                     US 1994-300000 A 19940902
                                     US 1994-303039 A 19940908
                                     US 1994-311486 A 19940923
                                     US 1994-311749 A 19940923
                                     US 1994-314397 A 19940928
                                     US 1994-316771 A 19941003
                                     US 1994-319492 A 19941007
                                     US 1994-321993 19941011
                                     US 1994-334847
                                                     19941104
                                     US 1994-337608 19941110
                                     US 1994-345516
                                                     19941128
                                     US 1994-357577 19941216
                                     US 1994-363233 19941223
                                     US 1995-380734 19950130
JP 09509323
            Т2
                     19970922
                                     JP 1995-522236 19950223
                                     WO 1995-IB156 W 19950223
                                     US 1994-201109 A 19940223
                                     US 1994-218934 A 19940329
                                     US 1994-222795 A 19940404
                                     US 1994-227958 A 19940415
                                     US 1994-228041 A 19940415
                                     US 1994-245736 A 19940518
                                     US 1994-271280 A 19940706
                                     US 1994-291932 A 19940815
                                     US 1994-291433 A 19940816
                                     US 1994-292620 A 19940817
                                     US 1994-293520 A 19940819
                                     US 1994-300000 A 19940902
                                     US 1994-311486 A 19940923
                                     US 1994-311749 A 19940923
                                     US 1994-314397 A 19940928
                                     US 1994-316771 A 19941003
                                     US 1994-319492 A 19941007
                                     US 1994-321993 A 19941011
                                     US 1994-334847 A 19941104
                                     US 1994-337608 19941110
                                     US 1994-345516
                                                    19941128
                                                    19941216
                                     US 1994-357577
                                     US 1994-363233 19941223
```

| | | | | | | | 3 1995-380734 19950130 |
|----|---------|-----|------------|-----------|-----|-----|------------------------------------|
| EP | | | | 20021127 | | | 2002-13004 19950223 |
| | R: AT, | BE, | CH, DE | , DK, ES, | FR, | GB, | GR, IT, LI, LU, NL, SE, MC, PT, IE |
| | | | | | | US | S 1994-201109 A 19940223 |
| | | | | | | | 3 1994-218934 A 19940329 |
| | | | | | | | 5 1994-222795 A 19940404 |
| | | | | | | | 3 1994-224483 A 19940407 |
| | | | | | | | 3 1994-227958 A 19940415 |
| | | | | | | | 3 1994-228041 A 19940415 |
| | | | | | | | 5 1994-245736 A 19940518 |
| | | | | | | | 5 1994-271280 A 19940706 |
| | | | | | | | 1994-291932 A 19940708 |
| | | | | | | | 1994-291433 A 19940816 |
| | | | | | | | |
| | | | | | | | 5 1994-292620 A 19940817 |
| | | | | | | | 3 1994-293520 A 19940819 |
| | | | | | | | 1994-300000 A 19940902 |
| | | | | | | | 1994-303039 A 19940908 |
| | | | | | | | 1994-311486 A 19940923 |
| | | | | | | | 1994-311749 A 19940923 |
| | | | | | | | 1994-314397 A 19940928 |
| | | | | | | | 1994-316771 A 19941003 |
| | | | | | | | 1994-319492 A 19941007 |
| | | | | | | | 1994-321993 A 19941011 |
| | | | | | | US | 1994-334847 A 19941104 |
| | | | | | | | 1994-337608 A 19941110 |
| | | | | | | | 1994-345516 A 19941128 |
| | | | | | | US | 1994-357577 A 19941216 |
| | | | | | | US | 1994-363233 A 19941223 |
| | | | | | | | 1995-380734 A 19950130 |
| | | | | | | | 1995-909920 A319950223 |
| US | 6146886 | | Α | 20001114 | | US | 1995-512861 19950807 |
| | | | | | | US | 1994-293520 B219940819 |
| | | | | | | | 1994-337608 A219941110 |
| | | | A1 | 19980611 | | AU | 1998-51819 19980112 |
| ΑU | 729657 | | В2 | 20010208 | | | |
| | | | | | | | 1996-623891 A 19960325 |
| AU | 9939188 | | A 1 | 19990916 | | | 1999-39188 19990713 |
| | | | | | | | 1995-26422 A319950518 |
| | 9947567 | | A 1 | 19991104 | | ΑU | 1999-47567 19990913 |
| ΑU | 737017 | | B2 | 20010809 | | | |
| | | | | | | AU | 1996-61744 A319960603 |
| | | | | | | | 1995-475460 A 19950607 |
| | | | | | | | 1994-292620 A 19940817 |
| | | | | | | | 1995-483715 A 19950607 |
| | | | | | | បន | 1994-293520 A 19940819 |
| | | | | | | | 1995-484607 A 19950607 |
| | | | | | | | 1994-300000 A 19940902 |
| | | | | | | US | 1994-303039 A 19940908 |
| | | | | | | US | 1994-311486 A 19940923 |
| | | | | | | US | 1994-311749 A 19940923 |
| | | | | | | | 1994-314397 A 19940928 |
| | | | | | | | 1994-316771 A 19941003 |
| | | | | | | | 1994-319492 A 19941007 |
| | | | | | | | 1994-321993 A 19941011 |
| | | | | | | | 1994-334847 A 19941104 |
| | | | | | | | 1994-337608 A 19941110 |
| | | | | | | | 1994-345516 A 19941128 |
| | | | | | | .= | |

| FAN | 1999:708889 | US 1994-357577 A 19941216
US 1994-363233 A 19941223
US 1995-380734 19950130 | |
|-----|--|--|-------------------------------|
| | PATENT NO. | KIND DATE APPLICATION NO. DATE | |
| PI | WO 9955847
WO 9955847 | A2 19991104 WO 1999-US9027 19990426
A3 20000615 | |
| | DE, DK,
JP, KE,
MN, MW,
TM, TR, | AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, TJ, TM | IN, IS,
MG, MK,
SL, TJ, |
| | ES, FI, | KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, GA, GN, GW, ML, MR, NE, SN, TD, TG US 1998-83217P P 19980427 US 1998-100842PP 19980918 US 1999-257608 A 19990225 US 1999-274553 A 19990323 | |
| | AU 9851819
AU 729657 | A1 19980611 AU 1998-51819 19980112
B2 20010208 | |
| | US 2002082225
CA 2326695 | US 1996-623891 A 19960325 A1 20020627 US 1999-274553 19990323 AA 19991104 CA 1999-2326695 19990426 US 1998-83217P P 19980427 US 1998-100842PP 19980918 US 1999-257608 A 19990225 US 1999-274553 A 19990323 | |
| | | WO 1999-US9027 W 19990426 A1 19991116 AU 1999-36657 19990426 B2 20030130 US 1998-83217P P 19980427 US 1998-100842PP 19980918 US 1999-257608 A 19990225 US 1999-274553 A 19990323 | |
| | EP 1075508
R: AT, BE,
IE, FI | WO 1999-US9027 W 19990426
A2 20010214 EP 1999-918837 19990426
CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, I | MC, PT, |
| | AU 9939188 | US 1998-83217P P 19980427
US 1998-100842PP 19980918
US 1999-257608 A 19990225
US 1999-274553 A 19990323
WO 1999-US9027 W 19990426
A1 19990916 AU 1999-39188 19990713 | |
| FAN | 1999:708899
PATENT NO. | AU 1995-26422 A319950518 KIND DATE APPLICATION NO. DATE | |
| PI | WO 9955857 | A2 19991104 WO 1999-US9348 19990428 | |
| | WO 9955857 W: AL, AM, DK, EE, KP, KR, | A3 20000224 AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, IPL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, ST | KE, KG,
MW, MX, |

| | | RW: | GH,
ES, | GM,
FI, | KE,
FR, | LS,
GB, | MW,
GR, | SD,
IE, | SL,
IT, | AM, SZ, U | UG,
MC,
SN, | ZW,
NL,
TD, | AT,
PT,
TG | BE,
SE, | CH, | CY,
BJ, | DE, | DK, |
|-----|--------------|-------|------------|------------|---------------|------------|----------------|------------|------------|----------------------------|--------------------------|--------------------------------------|---|---------------------------------|--|--------------------------------------|-----|-----|
| | AU 9
AU 7 | | | | | | 1998)
2001) | | | US | 199 | 98-1 | 86675 | 5 A | 1998:
1998: | 1104 | | |
| | us 6 | | | | A | | 2000: | 1003 | | | | | | | 1996
1998 | | | |
| | CA 2 | 3305 | 574 | | A | A | 1999: | 1104 | | CA | 199 | 99-2 | 33057 | 74 | 1997
1999
1998 | 0428 | | |
| | AU 9 | | | | | | 1999:
2002: | | | WO | 199 | 99-U | S9348 | 8 W | 1998
1999
1999 | 0428 | | |
| | EP 1 | .0737 | | | | | 2001 | | | US
WO
EP | 199
199
199 | 98-1:
99-U
99-9: | 86675
\$9348
21537 | 5 A
8 W
7 | 1998
1998
1999
1999 | 1104
0428
0428 | | |
| | | R: | AT,
IE, | | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | JP 2 | 20025 | 5127 | 94 | T | 2 | 2002 | 0508 | | US
WO
JP
US
US | 199
199
200
199 | 98-1
99-U
90-5
98-8
98-1 | 86675
89348
46005
37271
86675 | 5 A
8 W
1
P P
5 A | 1998
1998
1999
1998
1998 | 1104
0428
0428
0429
1104 | | |
| | AU 9 | 9391 | 188 | | A | 1 | 1999 | 0916 | | AU | 199 | 99-3 | 9188 | | 1999
1999
1995 | 0713 | | |
| FAN | 2000
PATE | | vo. | | KII | | DATE | | | AP | PLIC | CATI | ON NO | ٥. | DATE | | | |
| PI | US 6 | | | | A | | 2000 | | | US | 199 | 94-2 | 93520 | 0 B2 | 1995
1994 | 0819 | | |
| | US 5 | 59028 | 880 | | A | | 1999 | 0511 | | US | 199 | 94-3 | 37608 | В | 1994
1994
1994 | 1110 | | |
| | CA 2 | 22075 | õ93 | | A | A | 1996 | 0620 | | us
us
us
us | 199
199
199
199 | 94-3
94-3
94-3
95-3
95-4 | 54926
63253
63254
90856
26124 | 0 A
3 A
4 A
0 A
4 A | 1995
1994
1994
1995
1995
1995 | 1213
1223
1223
0217
0420 | | |
| | WO 9 | | 736 | CA, | A
A
JP, | 3 | 1996
1996 | | | US
US
US | 199
199
199 | 95-4
95-5
95-5 | 34509
1286
41369 | 9 A
1 A
5 A | 1995
1995
1995
1995 | 0504
0807
1005 | | |
| | | RW: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | បន | 199
199 | 94-3
94-3 | 54920
63253 | 0 A
3 A | MC,
1994
1994
1994 | 1213
1223 | PT, | SE |

```
US 1995-390850 A 19950217
                                           US 1995-426124 A 19950420
                                           US 1995-432874 A 19950502
                                           US 1995-434509 A 19950504
                                           US 1995-512861 A 19950807
                                           US 1995-541365 A 19951005
     EP 799313
                       A2
                            19971008
                                           EP 1995-942944
                                                            19951122
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                                           US 1994-354920 A 19941213
                                           US 1994-363253 A 19941223
                                           US 1994-363254 A 19941223
                                           US 1995-390850 A 19950217
                                           US 1995-426124 A 19950420
                                           US 1995-432874 A 19950502
                                           US 1995-434509 A 19950504
                                           US 1995-951P P 19950707
                                           US 1995-974P
                                                         P 19950707
                                           US 1995-512861 A 19950807
                                           US 1995-541365 A 19951005
                                           WO 1995-US15516W 19951122
     AU 9644120
                A1
                            19960703
                                           AU 1996-44120 19951130
                                           US 1994-354920 A 19941213
                                           US 1994-363253 A 19941223
                                           US 1994-363254 A 19941223
                                           US 1995-390850 A 19950217
                                           US 1995-426124 A 19950420
                                           US 1995-432874 A 19950502
                                           US 1995-434509 A 19950504
                                           US 1995-512861 A 19950807
                                           US 1995-541365 A 19951005
                                           WO 1995-US15516W 19951122
     AU 9851819
                     A1
                          19980611
                                           AU 1998-51819
                                                           19980112
     AU 729657
                      B2
                           20010208
                                          US 1996-623891 A 19960325
     AU 9939188
                      A1
                           19990916
                                          AU 1999-39188 19990713
                                           AU 1995-26422 A319950518
FAN
    2001:91444
     PATENT NO.
                      KIND DATE
                                          APPLICATION NO. DATE
                      _---
                           ------
                                           ______
PI
     US 6183959
                      В1
                           20010206
                                          US 1998-112086
                                                           19980708
                                           US 1997-51718P P 19970703
                                           US 1998-108087 A219980630
     AU 9851819
                      A1
                           19980611
                                          AU 1998-51819
                                                           19980112
     AU 729657
                      B2
                           20010208
                                          US 1996-623891 A 19960325
     EP 1321521
                      A1
                           20030625
                                          EP 2003-2270 19980505
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY
                                          US 1997-46059P P 19970509
                                          US 1997-49002P P 19970609
                                          US 1997-51718P P 19970703
                                          US 1997-56808P P 19970822
                                          US 1997-61321P P 19971002
                                          US 1997-61324P P 19971002
                                          US 1997-64866P P 19971105
                                          US 1997-68212P P 19971219
                                          EP 1998-920299 A319981112
```

| 0995 | 51006.3 | | Page 159 | |
|------|-----------------------------|----------|----------------------|--|
| | AU 9939188 | A1 | 19990916 | AU 1999-39188 19990713 |
| | US 6448009 | В1 | 20020910 | AU 1995-26422 A319950518
US 2000-676807 20000929
US 1997-51718P P 19970703
US 1998-108087 B219980630 |
| | US 2002192685 | A1 | 20021219 | US 1998-112086 A119980708 US 2002-103480 20020321 US 1997-51718P P 19970703 US 1998-108087 B219980630 US 1998-112086 A119980708 US 2000-676807 A120000929 |
| FAN | 2001:489885
PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | US 2001006801
US 6528639 | A1
B2 | 20010705
20030304 | US 1998-34113 19980303 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | US 1992-963322 B219921015
AU 1998-51819 19980112 |
| | AU 9939188 | A1 | 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| | US 2003166896 | A1 | 20030904 | US 2002-170864 20020613
US 1992-963322 B219921015
US 1993-149210 B219931108
US 1995-435521 A119950505
US 1998-34113 A119980303 |
| FAN | 2002:90645
PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | US 2002013458 | A1 | 20020131 | US 2000-504231 20000215
US 1999-274553 A219990323 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | AU 1998-51819 19980112 |
| | US 2002082225
AU 9939188 | A1
A1 | 20020627
19990916 | US 1996-623891 A 19960325
US 1999-274553 19990323
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| | US 2003171311 | A1 | 20030911 | US 2001-817879 20010326
US 1998-83217P P 19980427
US 1998-100842PP 19980918
US 1999-257608 B219990225
US 1999-274553 A219990323
US 2000-504231 A220000215
US 2000-611931 A220000707
US 2000-740332 A220001218 |
| | US 2003171311 | A1 | 20030911 | US 2000-740332 A220001216
US 2001-817879 20010326
US 1998-83217P P 19980427
US 1998-100842PP 19980918
US 1999-257608 B219990225
US 1999-274553 A219990323
US 2000-504231 A220000215
US 2000-611931 A220000707 |
| FAN | 2002:280961 | | | US 2000-740332 A220000707 |

```
20010308
                                               WO 2000-US23998 20000830
ΡI
     WO 2001016312
                        A2
                              20010809
     WO 2001016312
                       АЗ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
              HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                               US 1999-151713PP 19990831
                                               US 1999-156236PP 19990927
                                               US 1999-156467PP 19990927
                                               US 1999-406643 A 19990927
                                               US 1999-436430 A 19991108
                                               US 1999-169100PP 19991206
                                               US 1999-173612PP 19991229
                                               US 1999-474432 A 19991229
                                               US 1999-476387 A 19991230
                                               US 2000-498824 A 20000204
                                               US 2000-531025 A 20000320
                                               US 2000-197769PP 20000414
                                               US 2000-578223 A 20000523
                                               US 2000-636385 A 20000809
                                               AU 1998-51819
                                                                  19980112
     AU 9851819
                         A1
                              19980611
     AU 729657
                         B2
                              20010208
                                               US 1996-623891 A 19960325
     AU 9939188
                         A1
                              19990916
                                               AU 1999-39188 19990713
                                               AU 1995-26422 A319950518
     US 6528640
                         В1
                              20030304
                                               US 1999-474432 19991229
                                               US 1997-64866P P 19971105
                                               US 1998-83727P P 19980429
                                               US 1998-186675 A219981104
                                               US 1999-301511 A219990428
     US 6617438
                         В1
                              20030909
                                               US 1999-476387
                                                                  19991230
                                               US 1997-64866P P 19971105
                                               US 1998-83727P P 19980429
                                               US 1998-186675 A219981104
                                               US 1999-301511 A219990428
                                               US 1999-474432 A219991229
     EP 1212416
                        A2
                              20020612
                                               EP 2000-963298 20000830
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL
                                               US 1999-151713PP 19990831
                                               US 1999-156236PP 19990927
                                               US 1999-156467PP 19990927
                                               US 1999-406643 A 19990927
                                               US 1999-436430 A 19991108
                                               US 1999-169100PP 19991206
                                               US 1999-173612PP 19991229
                                               US 1999-474432 A 19991229
                                               US 1999-476387 A 19991230
                                               US 2000-498824 A 20000204
                                               US 2000-531025 A 20000320
                                               US 2000-197769PP 20000414
                                               US 2000-578223 A 20000523
                                               US 2000-636385 A 20000809
                                               WO 2000-US23998W 20000830
```

| | US 20 | 030502 | 259 | A | 1 | 2003 | 0313 | | U
U | | | | | 2000
1999 | | | |
|-----|------------------|---------------------------------|---------------------------------|--------------------------|---------------------------------|--------------------------|---------------------------------|---------------------------------|--|---|--|--|--|---|--|--------------------------|--------------------------|
| FAN | 2002:
PATEN | 793641
T NO. | - | KI | ND | DATE | | | | PPLI | | | | DATE | | | |
| ΡΙ | WO 20
W | CO,
GM,
LS,
PL,
UA, | AG,
CR,
HR,
LT,
PT, | CU,
HU,
LU,
RO, | AM,
CZ,
ID,
LV,
RU, | DE,
IL,
MA,
SD, | AU,
DK,
IN,
MD,
SE, | AZ,
DM,
IS,
MG,
SG, | BA,
DZ,
JP,
MK,
SI, | EC,
KE,
MN,
SK, | BG,
EE,
KG,
MW,
SL, | BR,
ES,
KP,
MX,
TJ, | BY,
FI,
KR,
MZ,
TM, | 2002
BZ,
GB,
KZ,
NO,
TN,
KG, | CA,
GD,
LC,
NZ,
TR, | GE,
LK,
OM,
TT, | GH,
LR,
PH,
TZ, |
| | R | W: GH, | GM,
DE, | DK, | ES, | FΙ, | FR, | GB, | GR,
GN,
US
US | IE,
GQ,
S 200
S 200
S 200
S 200 | IT,
GW,
01-8:
01-2:
01-8: | LU,
ML,
1787:
9687:
7747:
3505: | MC,
MR,
9 A
6PP
8 A
9PP | NL,
NE,
2001
2001
2001 | PT,
SN,
0326
0608
0608
1024 | SE. | TR. |
| | AU 985
AU 725 | | | A:
B2 | | 19980
20010 | | | ΑŪ | J 199 | 98-51 | 1819 | | 2001:
1998: | 0112 | | |
| | AU 993 | 39188 | | A. | L | 19990 | 916 | | AU | J 199 | 99-39 | 9188 | | 19960
19990
19950 | 0713 | | |
| | US 200 | | | A | | 20030 | | | U S
U S
U S
U S
U S
U S
U S | 5 200
5 199
5 199
5 199
5 200
5 200
5 200 | 01-81
98-83
98-10
99-25
99-25
00-50
00-61 | 17879
32171
30842
57608
74553
34231
11931 | 9
P P
2PP
3 B2
3 A2
1 A2
1 A2
2 A2 | 20010
19980
19980
19990
20000
20000 | 0326
0427
0918
0225
0323
0215 | | |
| | US 200 | 030683 | | A] | L | 20030 | 0410 | | 05
05
05
05
05 | 199
199
200
200 | 92-88
94-19
99-43
90-53 | 32712
33623
36430
31025
36385 | 2 B1
7 A1
0 A2
5 A2
5 A2 | 2001(
1992(
1994(
1999)
2000(
2000(
20001 | 0514
0207
.108
0320
0809 | | |
| | US 200 | 032068 | 87 | A] | | 20031 | .106 | | US
US
US
US
US
US
US
US
US | 199
200
200
200
200
200
200
200
200
200
2 | 92-88
94-19
99-43
90-53
90-63
91-29
91-33
91-33
92-35
92-38 | 32712
33627
36430
31025
36385
36347
36876
37478
35059
37055
35059
37055
37055
37055
37055
37055 | 2 B1
7 A1
7 A2
5 B2
5 B2
7 B2
6 B2
7 B2
6 B2
7 B2
6 PP
6 PP
6 PP
7 A2
7 A2 | 20020
19920
19940
19991
20000
20001
20010
20011
20020
20020
20020
20020
20020 | 0514
0207
.108
0320
0809
.024
0608
.024
.205
1220
1311
1326 | | |

```
US 2002-408378PP 20020905
                                             US 2002-409293PP 20020909
                                             US 2002-279401 20021024
     US 2003140362
                             20030724
                       Α1
                                             US 2001-296876PP 20010608
                                             US 2001-335059PP 20011024
                                             WO 2002-US9187 A220020326
     US 2003148985
                        A1
                             20030807
                                             US 2002-310294
                                                               20021205
                                             US 2001-337055PP 20011205
                             20030828
                                            WO 2003-US5043 20030220
     WO 2003070750
                      A2
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                             US 2002-358580PP 20020220
                                             US 2002-363124PP 20020311
                                             WO 2002-US9187 A 20020326
                                             US 2002-386782PP 20020606
                                             US 2002-401104PP 20020805
                                             US 2002-406784PP 20020829
                                             US 2002-408378PP 20020905
                                             US 2002-409293PP 20020909
                                             US 2003-440129PP 20030115
FAN 2002:828618
                      KIND DATE
                                           APPLICATION NO. DATE
     PATENT NO.
                                       WO 2002-XA9187 20020326
      ______
     WO 2002081494
                             20021017
                      A1
PT
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
                                             US 2001-817879 A 20010326
                                             US 2001-296876PP 20010608
                                             US 2001-877478 A 20010608
                                             US 2001-335059PP 20011024
                                             US 2001-337055PP 20011205
                                             AU 1998-51819
     AU 9851819
                        A1
                             19980611
                                                               19980112
     AU 729657
                        B2
                             20010208
                                             US 1996-623891 A 19960325
                                             AU 1999-39188 19990713
     AU 9939188
                        A1
                             19990916
                                             AU 1995-26422 A319950518
                             20030911
                                             US 2001-817879 20010326
     US 2003171311
                       A1
                                             US 1998-83217P P 19980427
                                             US 1998-100842PP 19980918
                                             US 1999-257608 B219990225
                                             US 1999-274553 A219990323
```

| FAN | US 2003068301 US 2003148985 2002:828619 | A1 20030410
A1 20030807 | US 2000-504231 A220000215 US 2000-611931 A220000707 US 2000-740332 A220001218 US 2001-877478 20010608 US 1992-882712 B119920514 US 1994-193627 A119940207 US 1999-436430 A219991108 US 2000-531025 A220000320 US 2000-636385 A220000809 US 2000-696347 A22001024 US 2002-310294 20021205 US 2001-337055PP 20011205 |
|-----|---|---|---|
| | PATENT NO. | KIND DATE | APPLICATION NO. DATE |
| PI | CO, CR,
GM, HR,
LS, LT,
PT, RO,
UG, US,
RW: GH, GM,
CY, DE, | CU, CZ, DE, DK, DM, HU, ID, IL, IN, IS, LU, LV, MA, MD, MG, RU, SD, SE, SG, SI, UZ, VN, YU, ZA, ZM, KE, LS, MW, MZ, SD, DK, ES, FI, FR, GB, | WO 2002-XB9187 20020326 BA, BB, BG, BR, BY, BZ, CA, CH, CN, DZ, EC, EE, ES, FI, GB, GD, GE, GH, JP, KE, KG, KP, KR, KZ, LC, LK, LR, MK, MN, MW, MX, NO, NZ, OM, PH, PL, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, GR, IE, IT, LU, MC, NL, PT, SE, TR, GN, GQ, ML, MR, NE, SN, TD, TG US 2001-817879 A 20010326 US 2001-296876PP 20010608 US 2001-335059PP 20011024 US 2001-337055PP 20011205 |
| | AU 9851819
AU 729657 | A1 19980611
B2 20010208 | AU 1998-51819 19980112 |
| | | | US 1996-623891 A 19960325 |
| | AU 9939188 | A1 19990916 | AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| FAN | | A1 20030911 A1 20030410 A1 20030807 KIND DATE | US 2001-817879 20010326 US 1998-83217P P 19980427 US 1998-100842PP 19980918 US 1999-257608 B219990225 US 1999-274553 A219990323 US 2000-504231 A220000215 US 2000-611931 A220000707 US 2000-740332 A220001218 US 2001-877478 20010608 US 1992-882712 B119920514 US 1994-193627 A119940207 US 1999-436430 A219991108 US 2000-531025 A220000320 US 2000-636385 A220000809 US 2000-696347 A220001024 US 2002-310294 20021205 US 2001-337055PP 20011205 |
| PI | WO 2002081494
W: AE, AG, | A1 20021017 | WO 2002-XC9187 20020326
BA, BB, BG, BR, BY, BZ, CA, CH, CN, |

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
           ES, ET, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
                                                           US 2001-817879 A 20010326
                                                           US 2001-296876PP 20010608
                                                           US 2001-877478 A 20010608
                                                           US 2001-335059PP 20011024
                                                           US 2001-337055PP 20011205
                                                           AU 1998-51819
                                      19980611
      AU 9851819
                               A1
                                                                                  19980112
      AU 729657
                               B2
                                      20010208
                                                           US 1996-623891 A 19960325
      AU 9939188
                               A1
                                      19990916
                                                           AU 1999-39188 19990713
                                                           AU 1995-26422 A319950518
                                                           US 2001-817879 20010326
      US 2003171311
                               A1
                                      20030911
                                                           US 1998-83217P P 19980427
                                                           US 1998-100842PP 19980918
                                                           US 1999-257608 B219990225
                                                           US 1999-274553 A219990323
                                                           US 2000-504231 A220000215
                                                           US 2000-611931 A220000707
                                                           US 2000-740332 A220001218
                                      20030410
                                                           US 2001-877478
      US 2003068301
                             A1
                                                                                 20010608
                                                           US 1992-882712 B119920514
                                                           US 1994-193627 A119940207
                                                           US 1999-436430 A219991108
                                                           US 2000-531025 A220000320
                                                           US 2000-636385 A220000809
                                                           US 2000-696347 A220001024
                                      20030807
                                                           US 2002-310294 20021205
      US 2003148985
                             A1
                                                           US 2001-337055PP 20011205
     2002:828621
FAN
                                                          APPLICATION NO. DATE
                              KIND DATE
       PATENT NO.
                                                           _____ =====
                                      _____
      WO 2002081494
                             A1
                                      20021017
                                                        WO 2002-XD9187 20020326
ΡI
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
           PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
                                                           US 2001-817879 A 20010326
                                                           US 2001-296876PP 20010608
                                                           US 2001-877478 A 20010608
                                                           US 2001-335059PP 20011024
                                                           US 2001-337055PP 20011205
      AU 9851819
                               A1
                                      19980611
                                                           AU 1998-51819
                                                                                  19980112
      AU 729657
                               B2
                                      20010208
                                                           US 1996-623891 A 19960325
                            Al 19990916
      AU 9939188
                                                           AU 1999-39188 19990713
```

| | | | | 20030911 | US US US US US US US US | 1995-2642
2001-8178
1998-8321
1998-1008
1999-2576
1999-2745
2000-5042
2000-6119
2000-7403 | 79
7P P
42PP
08 B
53 A
31 A
31 A | 20010326
19980427
19980918
219990225
219990323
220000215
220000707
220001218 | | |
|-----|--|--------------------------|-----------------------|----------------------------------|---|---|---|--|-----|-----|
| | 05 20030 | 98301 | AI | 20030410 | US
US
US
US | 2001-8774
1992-8827
1994-1936
1999-4364
2000-5310
2000-6363 | 12 B
27 A
30 A
25 A
85 A | 119920514
119940207
219991108
220000320
220000809 | | |
| | US 20031 | 48985 | A1 | 20030807 | US | 2000-6963
2002-3102
2001-3370 | 94 | 20021205 | | |
| FAN | 2002:889
PATENT N | | | DATE | API | PLICATION 1 | NO. | | | |
| PI | US 64829 | 32 | В1 | 20021119 | US
US | 1999-3015
1997-6486
1998-8372
1998-1866 | 11
6P P
7P P | 19990428
19971105
19980429 | | |
| | AU 98518
AU 72965 | | | 19980611
20010208 | AU | 1998-5181 | 9 | 19980112 | | |
| | | | | | | 1996-6238 | | | | |
| | ED 13215 | クス | | つれいつれなつに | | | | | | |
| | R: | AT, BE, | CH, DE | | | 2003-2270
GR, IT, LI | | | MC, | PT, |
| | R: | | CH, DE | | GB, G | GR, IT, LI | , LU | , NL, SE, | MC, | PT, |
| | R: | AT, BE, | CH, DE | | GB, G | | , LU
9P P | , NL, SE, | MC, | PT, |
| | R: | AT, BE, | CH, DE | | US
US
US
US | 1997-4605
1997-4900
1997-5171 | , LU
9P P
2P P
8P P | , NL, SE,
19970509
19970609
19970703 | MC, | PT, |
| | R: | AT, BE, | CH, DE | | US
US
US
US
US | 1997-4605
1997-4900
1997-5171
1997-5680 | , LU
9P P
2P P
8P P
8P P | , NL, SE,
19970509
19970609
19970703
19970822 | MC, | PT, |
| | R: | AT, BE, | CH, DE | | US
US
US
US
US
US | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132 | , LU
9P P
2P P
8P P
8P P | , NL, SE,
19970509
19970609
19970703
19970822
19971002 | MC, | PT, |
| | R: | AT, BE, | CH, DE | | US
US
US
US
US
US
US | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132 | 9P P
2P P
8P P
8P P
1P P | , NL, SE,
19970509
19970609
19970703
19970822
19971002
19971002 | MC, | PT, |
| | R: | AT, BE, | CH, DE | | US
US
US
US
US
US
US
US | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132 | 9P P P P P P P P P P P P P P P P P P P | , NL, SE,
19970509
19970609
19970703
19970822
19971002
19971002
19971105 | MC, | PT, |
| | R: | AT, BE,
IE, FI, | CH, DE, | , DK, ES, | US
US
US
US
US
US
US
US
US | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202 | 9P P P P P P P P P P P P P P P P P P P | , NL, SE,
19970509
19970609
19970703
19970822
19971002
19971105
19971219
319981112 | MC, | PT, |
| | R: | AT, BE,
IE, FI, | CH, DE, | | US
US
US
US
US
US
US
US
US
US | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866 | , LU
9P P
2P P
8P P
1P P
6P P
6P P
2P A
75 | , NL, SE, 19970509 19970609 19970703 19970822 19971002 19971005 19971219 319981112 19981104 | MC, | PT, |
| | R:
US 61275 | AT, BE, IE, FI, | CH, DE, | 20001003 | US
US
US
US
US
US
US
US
US
US
US | 1997-4605
1997-4900
1997-5171
1997-5630
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486 | PP | , NL, SE, 19970509 19970609 19970703 19971002 19971002 19971105 19971219 319981112 19981104 19971105 | MC, | PT, |
| | R: | AT, BE, IE, FI, | CH, DE, | , DK, ES, | US
US
US
US
US
US
US
US
US
US
US
AU | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1999-3918 | PP | , NL, SE, 19970509 19970609 19970703 19971002 19971002 19971105 19971219 319981112 19981104 19971105 19990713 | MC, | PT, |
| | R:
US 61275
AU 99391 | AT, BE, IE, FI, 35 | CH, DE, | 20001003 | US
US
US
US
US
US
US
US
US
US
AU
AU | 1997-4605
1997-4900
1997-5171
1997-5630
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486 | PP | , NL, SE, 19970509 19970609 19970703 19971002 19971002 19971105 19971219 319981112 19981104 19971105 19990713 | MC, | PT, |
| | R:
US 61275 | AT, BE, IE, FI, 35 | CH, DE, CY | 20001003
19990916 | US
US
US
US
US
US
US
US
US
US
US
US
US
U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1997-6486
1999-3918
1995-2642
1999-4744
1997-6486 | P P P P P P P P P P P P P P P P P P P | , NL, SE, 19970509 19970609 19970703 19971002 19971105 19971219 319981112 19981104 19971105 19990713 319950518 19991229 19971105 | MC, | PT, |
| | R:
US 61275
AU 99391 | AT, BE, IE, FI, 35 | CH, DE, CY | 20001003
19990916 | US
US
US
US
US
US
US
US
US
US
US
US
US
U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1997-6486
1999-3918
1995-2642
1999-4744
1997-6486
1998-8372 | P P P P P P P P P P P P P P P P P P P | , NL, SE, 19970509 19970609 19970703 19971002 19971105 19971219 319981112 19981104 19971105 19990713 319950518 19991229 19971105 19980429 | MC, | PT, |
| | R:
US 61275
AU 99391 | AT, BE, IE, FI, 35 | CH, DE, CY | 20001003
19990916 | US
US
US
US
US
US
US
US
US
US
US
US
US
U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1999-3918
1995-2642
1998-8372
1998-8372 | , LU PP | , NL, SE, 19970509 19970609 19970703 19971002 19971005 19971219 319981112 19981104 19971105 19990713 319950518 19991229 19971105 19980429 219981104 | MC, | PT, |
| | us 61275
Au 99391
us 65286 | AT, BE, FI, IE, FI, 835 | CH, DE, CY A A1 B1 | 20001003
19990916
20030304 | US
US
US
US
US
US
US
US
US
US
US
US
US
U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1999-3918
1995-2642
1998-8372
1998-8372
1998-1866
1999-3015 | , LU PP | , NL, SE, 19970509 19970609 19970703 19970822 19971002 19971105 19971219 319981112 19981104 19971105 19990713 319950518 19991229 19971105 19980429 219981104 219990428 | MC, | PT, |
| | R:
US 61275
AU 99391 | AT, BE, FI, IE, FI, 835 | CH, DE, CY | 20001003
19990916 | US U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1999-3918
1995-2642
1998-8372
1998-8372 | , LU PP | , NL, SE, 19970509 19970609 19970703 19970822 19971002 19971105 19971219 319981112 19981104 19971105 19990713 319950518 19991229 19971105 19980429 219981104 219990428 19991230 | MC, | PT, |
| | us 61275
Au 99391
us 65286 | AT, BE, FI, IE, FI, 835 | CH, DE, CY A A1 B1 | 20001003
19990916
20030304 | US
US
US
US
US
US
US
US
US
US
US
US
US
U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1999-3918
1995-2642
1999-4744
1997-6486
1998-8372
1998-1866
1999-3015
1999-4763
1999-4763
1999-4763
1998-8372 | , LU PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP | , NL, SE, 19970509 19970609 19970703 19970822 19971002 19971105 19971219 319981112 19981104 19971105 19990713 319950518 19991229 19971105 19980429 219981104 219990428 19991230 19971105 19980429 | MC, | PT, |
| | us 61275
Au 99391
us 65286 | AT, BE, FI, IE, FI, 835 | CH, DE, CY A A1 B1 | 20001003
19990916
20030304 | US
US
US
US
US
US
US
US
US
US
US
US
US
U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1997-6486
1995-2642
1998-8372
1998-1866
1999-3015
1999-4763
1999-4763
1997-6486
1998-8372
1998-1866 | , PP PP PP PP A PP A PP A PP A PP A PP | , NL, SE, 19970509 19970609 19970703 19970822 19971002 19971105 19971219 319981112 19981104 19971105 19990713 319950518 19991229 19971105 19980429 219981104 219990428 19991230 19971105 19980429 219981104 | MC, | PT, |
| | us 61275
Au 99391
us 65286 | AT, BE, FI, IE, FI, 835 | CH, DE, CY A A1 B1 | 20001003
19990916
20030304 | US U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1999-3918
1995-2642
1998-8372
1998-1866
1999-3015
1999-4763
1999-4763
1998-8372
1998-1866
1999-3015 | , PP PP PP PP A PP PP A PP PP A PP PP A PP A PP A A PP A A PP A | , NL, SE, 19970509 19970609 19970703 19970822 19971002 19971105 19971219 319981112 19981104 19971105 19990713 319950518 19991229 19971105 19980429 219981104 219990428 19991230 19971105 19980429 219981104 219990428 | MC, | PT, |
| | R:
US 61275
AU 99391
US 65286
US 66174 | AT, BE, IE, FI, 35 88 40 | CH, DE, CY A A1 B1 | 20001003
19990916
20030304 | US U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1997-6486
1995-2642
1998-8372
1998-1866
1999-3015
1999-4763
1998-8372
1998-1866
1999-3015
1998-8372
1998-1866
1999-3015 | , PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP | , NL, SE, 19970509 19970609 19970703 19970822 19971002 19971105 19971219 319981104 19971105 19990713 319950518 19991229 19971105 19980429 219981104 219990428 19991229 19971105 19980429 219981104 219990428 219991229 | MC, | PT, |
| | us 61275
Au 99391
us 65286 | AT, BE, IE, FI, 35 88 40 | CH, DE, CY A A1 B1 | 20001003
19990916
20030304 | US U | 1997-4605
1997-4900
1997-5171
1997-5680
1997-6132
1997-6132
1997-6486
1997-6821
1998-9202
1998-1866
1997-6486
1999-3918
1995-2642
1998-8372
1998-1866
1999-3015
1999-4763
1999-4763
1998-8372
1998-1866
1999-3015 | , PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP | , NL, SE, 19970509 19970609 19970703 19970822 19971002 19971105 19971219 319981104 19971105 19990713 319950518 19991229 19971105 19980429 219981104 219990428 19991230 19971105 19980429 219981104 219990428 219991229 20000823 | MC, | PT, |

| | US 2003105308 | A1 20030102 A1 20030605 | US 1998-186675 A119981104 US 2001-825805 20010404 US 1997-64866P P 19971105 US 1998-83727P P 19980429 US 1998-186675 A219981104 US 1999-301511 A219990428 US 1999-474432 A219991229 US 1999-476387 A219991230 US 2000-578223 A220000523 US 2001-918728 20010731 US 1997-64866P P 19971105 US 1998-83727P P 19980429 US 1998-186675 A219981104 US 1999-301511 A219990428 US 1999-474432 A219991229 US 1999-476387 A219991229 US 1999-476387 A219991230 US 2000-578223 A220000523 US 2001-825805 A220010404 |
|-----|--|--|---|
| FAN | 2002:907169
PATENT NO. | KIND DATE | APPLICATION NO. DATE |
| PI | | A1 20021128 A2 19970730 | US 2001-864785 20010523
US 1992-987132 B219921207
US 1994-245466 B219940518
US 1994-291932 A119940815
US 1996-777916 A219961223
EP 1997-101534 19930702 |
| | EP 786522 | | |
| | EP 1251170
EP 1251170
R: AT, BE, | A2 20021023
A3 20021030
CH, DE, DK, ES, FR | EP 2002-5642 19930702
R, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE |
| | . , | ,,,, | US 1992-916763 A 19920717
US 1992-987132 A 19921207
US 1992-989848 A 19921207
US 1992-989849 A 19921207
US 1993-8895 A 19930119
EP 1993-918144 A319930702 |
| | US 5658780 | A 19970819 | US 1994-291932 19940815
US 1992-987132 B219921207 |
| | US 5817796 | A 19981006 | US 1994-245466 B219940518 US 1995-435628 19950505 US 1992-936422 B119920826 US 1992-987132 B219921207 US 1994-192943 A219940207 US 1994-245466 B219940518 US 1995-373124 A319950113 |
| | US 6410224 | B1 20020625 | US 1996-777916 19961223
US 1992-987132 B219921207
US 1994-245466 B219940518
US 1994-291932 A119940815 |

Page 166

FAN 2002:927617

```
PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                      ----
                            _____
                                            _____
                    A2
A3
                            20021205
                                            WO 2002-US16840 20020529
ΡI
     WO 2002097114
     WO 2002097114
                            20030508
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                            US 2001-294140PP 20010529
                                            US 2001-296249PP 20010606
                                            US 2001-318471PP 20010910
                                            AU 1998-51819
     AU 9851819
                       Α1
                            19980611
                                                             19980112
     AU 729657
                       B2
                            20010208
                                            US 1996-623891 A 19960325
     AU 9939188
                       Α1
                            19990916
                                            AU 1999-39188
                                                             19990713
                                            AU 1995-26422 A319950518
     WO 2002097114
                       A2
                            20021205
                                            WO 2002-XA16840 20020529
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                            US 2001-294140PP 20010529
                                            US 2001-296249PP 20010606
                                            US 2001-318471PP 20010910
                                            WO 2002-US16840A 20020529
     US 2003153521
                       A1
                            20030814
                                            US 2002-238700
                                                            20020910
                                            US 2001-318471PP 20010910
                                            WO 2002-US16840A 20020529
     WO 2003070912
                      A2
                            20030828
                                            WO 2003-US5045
                                                            20030220
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                            US 2001-296249PP 20010606
                                            US 2001-916466 A 20010725
                                            US 2002-358580PP 20020220
                                            US 2002-363124PP 20020311
                                            WO 2002-US16840A120020529
                                            US 2002-163552 A120020606
```

```
US 2002-386782PP 20020606
                                              US 2002-393924PP 20020703
                                              US 2002-406784PP 20020829
                                              US 2002-408378PP 20020905
                                              US 2002-409293PP 20020909
                                              US 2002-251117 A120020919
                                              US 2002-277494 A120021021
                                              US 2003-440129PP 20030115
FAN
    2002:940624
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO. DATE
                                              -----
                              _____
                                        WO 2002-XA16840 20020529
     WO 2002097114 A2
                              20021205
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
         PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                              US 2001-294140PP 20010529
                                              US 2001-296249PP 20010606
                                              US 2001-318471PP 20010910
                                              WO 2002-US16840A 20020529
     AU 9851819
                        Αl
                              19980611
                                              AU 1998-51819
                                                               19980112
     AU 729657
                        B2
                              20010208
                                              US 1996-623891 A 19960325
     AU 9939188
                              19990916
                        A1
                                              AU 1999-39188 19990713
                                              AU 1995-26422 A319950518
     WO 2002097114 A2
WO 2002097114 A3
                                              WO 2002-US16840 20020529
                              20021205
                              20030508
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                              US 2001-294140PP 20010529
                                              US 2001-296249PP 20010606
                                              US 2001-318471PP 20010910
FAN 2003:5479
                                              APPLICATION NO. DATE
     PATENT NO.
                       KIND DATE
                       ____
     US 2003004122
                       A1
                              20030102
                                              US 2001-825805
                                                                20010404
ΡI
                                              US 1997-64866P P 19971105
                                              US 1998-83727P P 19980429
                                              US 1998-186675 A219981104
                                              US 1999-301511 A219990428
                                              US 1999-474432 A219991229
                                              US 1999-476387 A219991230
                                              US 2000-578223 A220000523
     AU 9851819
                        A1
                              19980611
                                              AU 1998-51819
                                                               19980112
```

| | AU | 72965 | 57 | | F | 32 | 2001 | 0208 | | | | | | | | | | | |
|-----|--------|------------------|-------|-----|----|------------|--------------|-------|---|----------|------|------------|------------------------|------|------|------|------------|-----|-----|
| | מים | 13215 | 501 | | 7 | ١1 | 2003 | 0625 | | US
EF | | | 2389:
270 | | | | 325
505 | | |
| | C.F | 1321.
R: | | | | | | | | GB, | | | | | | | | MC. | PT. |
| | | | | FI, | | , | , | | • | | | | | | | | | , | |
| | | | | | | | | | | | | | 60591 | | | | | | |
| | | | | | | | | | | | | | 9002 | | | | | | |
| | | | | | | | | | | | | | 1718)
6808) | | | | | | |
| | | | | | | | | | | | | | 1321 | | | | | | |
| | | | | | | | | | | | | | 1324 | | | | | | |
| | | | | | | | | | | | | | 4866 | | | | | | |
| | | | | | | | | | | | | | 82121 | | | | | | |
| | | | | | | | | | | EF | 19 | 98-9 | 2029 | 9 A3 | 3199 | 981 | 112 | | |
| | US | 61275 | 535 | | P | A | 2000 | 1003 | | | | | 8667 | | | | | | |
| | , | | | | | | | | | | | | 48661 | | | | | | |
| | US | 64829 | 932 | | E | 31 | 2002 | 1119 | | | | | 0151 | | | | | | |
| | | | | | | | | | | | | | 48661
37271 | | | | | | |
| | | | | | | | | | | | | | 3 <i>1211</i>
8667: | | | | | | |
| | זזב | 99391 | 188 | | 72 | 1 | 1999 | 0916 | | | | | 9188 | | | | 713 | | |
| | AO | JJ 3 3 3 3 | | | | 7.1 | 1000 | 0510 | | | | | 6422 | | | | | | |
| | បន | 65286 | 540 | | E | 31 | 2003 | 0304 | | | | | 74432 | | | | | | |
| | | | | | | | | | | US | 19 | 97-6 | 48661 | P P | 199 | 971 | 105 | | |
| | | | | | | | | | | | | | 37271 | | | | | | |
| | | | | | | | | | | | | | 8667 | | | | | | |
| | | | | | _ | | 0000 | 0000 | | | | | 0151 | | | | | | |
| | US | 66174 | 138 | | E | 31 | 2003 | 0909 | | | | | 7638°
48661 | | | | | | |
| | | | | | | | | | | | | | 37271 | | | | | | |
| | | | | | | | | | | | | | 8667 | | | | | | |
| | | | | | | | | | | | | | 0151 | | | | | | |
| | | | | | | | | | | | | | 74432 | | | | | | |
| | បន | 65094 | 160 | | E | 31 | 2003 | 0121 | | បន | 20 | 00-6 | 4496 | 5 | 200 | 000 | 823 | | |
| | | | | | | | | | | | | | 48661 | | | | | | |
| | | | | | _ | | 0000 | 0605 | | | | | 86675 | | | | | | |
| | US | 20031 | 10530 | 78 | 7 | ΥT | 2003 | 0605 | | | | | 18728 | | | | 731 | | |
| | | | | | | | | | | | | | 48661
37271 | | | | | | |
| | | | | | | | | | | | | | 8667! | | | | | | |
| | | | | | | | | | | | | | 0151 | | | | | | |
| | | | | | | | | | | | | | 74432 | | | | | | |
| | | | | | | | | | | | | | 76381 | | | | | | |
| | | | | | | | | | | | | | 78223 | | | | | | |
| | 000 | 22.166 | 2050 | | | | | | | US | 20 | 01-8 | 2580 | o Az | 2200 |)10 | 404 | | |
| FAN | |)3:168
TENT 1 | | | кт | ND | DATE | | | AF | т,тч | CATT | ON NO | o | DA' | re: | | | |
| | | | | | | | | | | | | | | | | | | | |
| PI | US | 65286 | 540 | | E | 31 | 2003 | 0304 | | US | 19 | 99-4 | 74432 | 2 | 199 | 991 | 229 | | |
| | | | | | | | | | | | | | 48661 | | | | | | |
| | | | | | | | | | | | | | 37271 | | | | | | |
| | | | | | | | | | | | | | 8667 | | | | | | |
| | 70 5 5 | 00510 | 210 | | 70 | . 1 | 1000 | 0611 | | | | | 0151 | | | | 428
112 | | |
| | | 98518
72965 | | | | A1
32 | 1998
2001 | | | AU | , та | 30~3 | 1819 | | 195 | 90 U | 112 | | |
| | ΑU | 16303 | , , | | E | ,_ | 2001 | 02.00 | | IIS | 19 | 96-6 | 2389: | 1 A | 199 | 960 | 325 | | |
| | EΡ | 13215 | 521 | | 2 | A 1 | 2003 | 0625 | | | | | 230 <i>3.</i>
270 | | | | 505 | | |
| | | | | | • | | | | | | | - - | | | | | | | |

```
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, FI, CY
                                      US 1997-46059P P 19970509
                                      US 1997-49002P P 19970609
                                      US 1997-51718P P 19970703
                                      US 1997-56808P P 19970822
                                      US 1997-61321P P 19971002
                                      US 1997-61324P P 19971002
                                      US 1997-64866P P 19971105
                                      US 1997-68212P P 19971219
                                      EP 1998-920299 A319981112
                                      US 1998-186675 19981104
                  Α
                       20001003
US 6127535
                                      US 1997-64866P P 19971105
                                                     19990428
US 6482932
                  В1
                       20021119
                                      US 1999-301511
                                      US 1997-64866P P 19971105
                                      US 1998-83727P P 19980429
                                      US 1998-186675 A219981104
AU 9939188
                  Α1
                       19990916
                                      AU 1999-39188
                                                       19990713
                                      AU 1995-26422 A319950518
                       20030909
                                      US 1999-476387 19991230
US 6617438
                  В1
                                      US 1997-64866P P 19971105
                                      US 1998-83727P P 19980429
                                      US 1998-186675 A219981104
                                      US 1999-301511 A219990428
                                      US 1999-474432 A219991229
                       20030121
                                      US 2000-644966
                                                       20000823
US 6509460
                  В1
                                      US 1997-64866P P 19971105
                                      US 1998-186675 A119981104
WO 2001016312
                 A2
                       20010308
                                      WO 2000-US23998 20000830
WO 2001016312
                 A3
                       20010809
    W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
        HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
        LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
        DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
        CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                      US 1999-151713PP 19990831
                                      US 1999-156236PP 19990927
                                      US 1999-156467PP 19990927
                                      US 1999-406643 A 19990927
                                      US 1999-436430 A 19991108
                                      US 1999-169100PP 19991206
                                      US 1999-173612PP 19991229
                                      US 1999-474432 A 19991229
                                      US 1999-476387 A 19991230
                                      US 2000-498824 A 20000204
                                      US 2000-531025 A 20000320
                                      US 2000-197769PP 20000414
                                      US 2000-578223 A 20000523
                                      US 2000-636385 A 20000809
                  A2
                                      EP 2000-963298 20000830
                       20020612
EP 1212416
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, SI, LT, LV, FI, RO, MK, CY, AL
                                      US 1999-151713PP 19990831
                                      US 1999-156236PP 19990927
                                      US 1999-156467PP 19990927
```

| | | | | US 1999-406643 A 19990927 US 1999-436430 A 19991108 US 1999-169100PP 19991229 US 1999-474432 A 19991229 US 1999-476387 A 19991230 US 2000-498824 A 20000204 US 2000-531025 A 20000320 US 2000-197769PP 20000414 US 2000-578223 A 20000523 US 2000-636385 A 20000809 WO 2000-US23998W 20000830 |
|-----|--|----------------|--|---|
| | US 2003004122 | A1 | 20030102 | US 2001-825805 20010404 US 1997-64866P P 19971105 US 1998-83727P P 19980429 US 1998-186675 A219981104 US 1999-301511 A219990428 US 1999-474432 A219991229 US 1999-476387 A219991230 US 2000-578223 A220000523 |
| | US 2003105308 | A1 | 20030605 | US 2001-918728 20010731
US 1997-64866P P 19971105
US 1998-83727P P 19980429
US 1998-186675 A219981104
US 1999-301511 A219990428
US 1999-474432 A219991229
US 1999-476387 A219991230
US 2000-578223 A220000523
US 2001-825805 A220010404 |
| FAN | 2003:261013 | | | |
| | PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | PATENT NO.

US 2003064945 | KIND

A1 | DATE

20030403 | APPLICATION NO. DATE US 2001-916466 20010725 US 1997-36476P P 19970131 US 1997-985162 A119971204 US 1999-401063 A219990922 US 2001-848754 A220010503 |
| PI | | | | US 2001-916466 20010725
US 1997-36476P P 19970131
US 1997-985162 A119971204
US 1999-401063 A219990922 |
| ΡΙ | US 2003064945 | A1 | 20030403 | US 2001-916466 20010725
US 1997-36476P P 19970131
US 1997-985162 A119971204
US 1999-401063 A219990922
US 2001-848754 A220010503
US 1997-985162 19971204
US 1997-36476P P 19970131
AU 1998-51819 19980112 |
| PI | US 2003064945 US 6057156 AU 9851819 | A1 A A1 | 20030403
20000502
19980611 | US 2001-916466 20010725
US 1997-36476P P 19970131
US 1997-985162 A119971204
US 1999-401063 A219990922
US 2001-848754 A220010503
US 1997-985162 19971204
US 1997-36476P P 19970131
AU 1998-51819 19980112
US 1996-623891 A 19960325
AU 1999-39188 19990713 |
| PI | US 2003064945 US 6057156 AU 9851819 AU 729657 | A1 A1 B2 | 20030403
20000502
19980611
20010208 | US 2001-916466 20010725 US 1997-36476P P 19970131 US 1997-985162 Al19971204 US 1999-401063 A219990922 US 2001-848754 A220010503 US 1997-985162 19971204 US 1997-36476P P 19970131 AU 1998-51819 19980112 US 1996-623891 A 19960325 AU 1999-39188 19990713 AU 1995-26422 A319950518 US 1999-401063 19990922 US 1997-36476P P 19970131 |
| PI | US 2003064945 US 6057156 AU 9851819 AU 729657 AU 9939188 | A1 A1 A1 B2 A1 | 20030403
20000502
19980611
20010208
19990916 | US 2001-916466 20010725
US 1997-36476P P 19970131
US 1997-985162 Al19971204
US 1999-401063 A219990922
US 2001-848754 A220010503
US 1997-985162 19971204
US 1997-36476P P 19970131
AU 1998-51819 19980112
US 1996-623891 A 19960325
AU 1999-39188 19990713
AU 1995-26422 A319950518
US 1999-401063 19990922 |

```
US 2003186909
                          A1
                                 20031002
                                                  US 2002-277494 20021021
                                                  US 1997-36749P P 19970127
                                                  US 1997-985162 A119971204
                                                  US 1999-401063 A119990922
                                                  US 2001-848754 A220010503
                                                  US 2001-916466 A120010725
      WO 2003070912
                          A2
                                20030828
                                                  WO 2003-US5045
                                                                     20030220
              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
               GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
               RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
               ML, MR, NE, SN, TD, TG
                                                  US 2001-296249PP 20010606
                                                  US 2001-916466 A 20010725
                                                  US 2002-358580PP 20020220
                                                  US 2002-363124PP 20020311
                                                  WO 2002-US16840A120020529
                                                 US 2002-163552 A120020606
                                                 US 2002-386782PP 20020606
                                                 US 2002-393924PP 20020703
                                                 US 2002-406784PP 20020829
                                                 US 2002-408378PP 20020905
                                                 US 2002-409293PP 20020909
                                                 US 2002-251117 A120020919
                                                 US 2002-277494 A120021021
                                                 US 2003-440129PP 20030115
FAN
    2003:281942
     PATENT NO.
                         KIND DATE
                                                 APPLICATION NO. DATE
                                                 -----
PΙ
     US 2003068301
                          A1
                                20030410
                                                 US 2001-877478
                                                                     20010608
                                                 US 1992-882712 B119920514
                                                 US 1994-193627 A119940207
                                                 US 1999-436430 A219991108
                                                 US 2000-531025 A220000320
                                                 US 2000-636385 A220000809
                                                 US 2000-696347 A220001024
     US 6017756
                          Α
                                20000125
                                                 US 1994-193627 19940207
                                                 US 1992-882712 B119920514
     AU 9851819
                          A1
                                19980611
                                                 AU 1998-51819
                                                                    19980112
     AU 729657
                          B2
                                20010208
                                                 US 1996-623891 A 19960325
     AU 9939188
                               19990916
                         A1
                                                 AU 1999-39188 19990713
                                                 AU 1995-26422 A319950518
     US 2003068301
                        A1
                               20030410
                                                 US 2001-877478
                                                                    20010608
                                                 US 1992-882712 B119920514
                                                 US 1994-193627 A119940207
                                                 US 1999-436430 A219991108
                                                 US 2000-531025 A220000320
                                                 US 2000-636385 A220000809
                                                 US 2000-696347 A220001024
                                                 US 2001-877478 A 20010608
```

```
WO 2002081494
                  A1
                       20021017
                                      WO 2002-US9187
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
        GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
        PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
        UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
        TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
        CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
        BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                      US 2001-817879 A 20010326
                                      US 2001-296876PP 20010608
                                      US 2001-877478 A 20010608
                                      US 2001-335059PP 20011024
                                      US 2001-337055PP 20011205
WO 2002081494
                  A1
                       20021017
                                      WO 2002-XA9187
                                                       20020326
       AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
        GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
        PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
        UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
        CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
        BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD,
                                      US 2001-817879 A 20010326
                                      US 2001-296876PP 20010608
                                      US 2001-877478 A 20010608
                                      US 2001-335059PP 20011024
                                      US 2001-337055PP 20011205
                                      WO 2002-XB9187
                       20021017
                                                       20020326
WO 2002081494
                  A1
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
        GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
        PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
        UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
        CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
        BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD,
                                      US 2001-817879 A 20010326
                                      US 2001-296876PP 20010608
                                      US 2001-877478 A 20010608
                                      US 2001-335059PP 20011024
                                      US 2001-337055PP 20011205
                       20021017
WO 2002081494
                  A1
                                      WO 2002-XC9187
                                                       20020326
       PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
        CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
        BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
                                      US 2001-817879 A 20010326
```

```
US 2001-296876PP 20010608
                                             US 2001-877478 A 20010608
                                             US 2001-335059PP 20011024
                                             US 2001-337055PP 20011205
                       A1
                             20021017
                                             WO 2002-XD9187 20020326
     WO 2002081494
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
                                             US 2001-817879 A 20010326
                                             US 2001-296876PP 20010608
                                             US 2001-877478 A 20010608
                                             US 2001-335059PP 20011024
                                             US 2001-337055PP 20011205
     US 2003206887
                      A1
                             20031106
                                             US 2002-244647 20020916
                                             US 1992-882712 B119920514
                                             US 1994-193627 A119940207
                                             US 1999-436430 A219991108
                                             US 2000-531025 B220000320
                                             US 2000-636385 B220000809
                                             US 2000-696347 B220001024
                                             US 2001-296876PP 20010608
                                             US 2001-877478 B220010608
                                             US 2001-335059PP 20011024
                                             US 2001-337055PP 20011205
                                             US 2002-358580PP 20020220
                                             US 2002-363124PP 20020311
                                             WO 2002-US9187 A220020326
                                             US 2002-386782PP 20020606
                                             US 2002-406784PP 20020829
                                             US 2002-408378PP 20020905
                                             US 2002-409293PP 20020909
FAN 2003:296081
     PATENT NO.
                      KIND DATE
                                             APPLICATION NO. DATE
                                             US 6548657
                       В1
                             20030415
                                             US 1998-216584 19981218
PΤ
                                             US 1997-49002P P 19970609
                                             US 1997-68212P P 19971219
                                             US 1998-94381 A219980609
                        A1
                             19980611
                                             AU 1998-51819
                                                               19980112
     AU 9851819
     AU 729657
                        B2
                             20010208
                                             US 1996-623891 A 19960325
                             20030625
                                             EP 2003-2270 19980505
     EP 1321521
                       A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY
                                             US 1997-46059P P 19970509
                                             US 1997-49002P P 19970609
                                             US 1997-51718P P 19970703
                                             US 1997-56808P P 19970822
                                             US 1997-61321P P 19971002
                                             US 1997-61324P P 19971002
                                             US 1997-64866P P 19971105
```

| | us 6280936 | В1 | 20010828 | US 1997-68212P P 19971219
EP 1998-920299 A319981112
US 1998-94381 19980609 |
|-----|---------------------------|------------|----------------------|--|
| | AU 9939188 | A1 | 19990916 | US 1997-49002P P 19970609
AU 1999-39188 19990713 |
| | US 2003170644 | A1 | 20030911 | AU 1995-26422 A319950518
US 2002-112814 20020329
US 1997-49002P P 19970609
US 1997-68212P P 19971219
US 1998-94381 A319980609 |
| | US 2003144489 | A1 | 20030731 | US 1998-216584 A319981218
US 2002-156433 20020528
US 1997-49002P P 19970609
US 1997-68212P P 19971219
US 1998-94381 A319980609
US 1998-216584 A319981218
US 2002-112814 A220020329 |
| FAN | 2003:300541 PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | us 2003073207 | A1 | 20030417 | US 2001-848754 20010503
US 1997-36476P P 19970131
US 1997-985162 A119971204
US 1999-401063 A219990922 |
| | US 6057156 | Α | 20000502 | US 1997-985162 19971204
US 1997-36476P P 19970131 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | AU 1998-51819 19980112 |
| | AU 9939188 | A 1 | 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713 |
| | US 6623962 | В1 | 20030923 | AU 1995-26422 A319950518
US 1999-401063 19990922
US 1997-36476P P 19970131 |
| | US 2003064945 | A1 | 20030403 | US 1997-985162 A119971204
US 2001-916466 20010725
US 1997-36476P P 19970131
US 1997-985162 A119971204
US 1999-401063 A219990922 |
| | US 2003186909 | A1 | 20031002 | US 2001-848754 A220010503
US 2002-277494 20021021
US 1997-36749P P 19970127
US 1997-985162 A119971204
US 1999-401063 A119990922
US 2001-848754 A220010503 |
| FAN | 2003:309404
PATENT NO. | KIND | DATE | US 2001-916466 A120010725 APPLICATION NO. DATE |
| PI | US 2003073207 | A1 | 20030417 | US 2001-848754 20010503
US 1997-36476P P 19970131
US 1997-985162 A119971204 |
| | US 6057156 | A | 20000502 | US 1999-401063 A219990922
US 1997-985162 19971204
US 1997-36476P P 19970131 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | AU 1998-51819 19980112 |
| | | | | US 1996-623891 A 19960325 |

| 0995 | 51006.3 | | Page 177 | |
|------|---------------------------|----------|----------------------|---|
| | AU 9939188 | A1 | 19990916 | AU 1999-39188 19990713 |
| | US 6623962 | В1 | 20030923 | AU 1995-26422 A319950518
US 1999-401063 19990922
US 1997-36476P P 19970131
US 1997-985162 A119971204 |
| FAN | 2003:331124
PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| ΡΙ | US 2003068301 | A1 | 20030410 | US 2001-877478 20010608
US 1992-882712 B119920514
US 1994-193627 A119940207
US 1999-436430 A219991108
US 2000-531025 A220000320
US 2000-636385 A220000809
US 2000-696347 A220001024
US 2001-877478 A 20010608 |
| | US 6017756 | A | 20000125 | US 1994-193627 19940207
US 1992-882712 B119920514 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | AU 1998-51819 19980112 |
| | AU 9939188 | A1 | 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713 |
| | US 2003068301 | A1 | 20030410 | AU 1995-26422 A319950518 US 2001-877478 20010608 US 1992-882712 B119920514 US 1994-193627 A119940207 US 1999-436430 A219991108 US 2000-531025 A220000320 US 2000-636385 A220000809 |
| FAN | 2003:376264
PATENT NO. | KIND | DATE | US 2000-696347 A220001024 APPLICATION NO. DATE |
| PI | US 2003092003 |
A1 | 20030515 | US 2001-930423 20010815 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | US 1999-173612PP 19991229
US 2000-745237 A220001220
AU 1998-51819 19980112 |
| | AU 9939188 | A1 | 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713 |
| | US 2003143708 | Al | 20030731 | AU 1995-26422 A319950518
US 2000-745237 20001220
US 1999-173612PP 19991229 |
| FAN | 2003:435353
PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | US 2003105308 | A1 | 20030605 | US 2001-918728 20010731
US 1997-64866P P 19971105
US 1998-83727P P 19980429
US 1998-186675 A219981104
US 1999-301511 A219990428
US 1999-474432 A219991229
US 1999-476387 A219991230
US 2000-578223 A220000523
US 2001-825805 A220010404 |
| | AU 9851819
AU 729657 | A1
B2 | 19980611
20010208 | AU 1998-51819 19980112 |

| | EP 1321521
R: AT, BE,
IE, FI, | CH, DE, | | US 1996-623891 A 19960325
EP 2003-2270 19980505
TR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
US 1997-46059P P 19970509
US 1997-49002P P 19970609
US 1997-51718P P 19970703
US 1997-56808P P 19970822
US 1997-61321P P 19971002
US 1997-61324P P 19971002
US 1997-64866P P 19971105
US 1997-68212P P 19971219 |
|-----|--|----------------|----------------------------------|---|
| | US 6127535 | A | 20001003 | EP 1998-920299 A319981112
US 1998-186675 19981104
US 1997-64866P P 19971105 |
| | US 6482932 | В1 | 20021119 | US 1999-301511 19990428
US 1997-64866P P 19971105
US 1998-83727P P 19980429
US 1998-186675 A219981104 |
| | AU 9939188 | A1 | 19990916 | AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| | US 6528640 | B1 | 20030304 | US 1999-474432 19991229
US 1997-64866P P 19971105
US 1998-83727P P 19980429
US 1998-186675 A219981104
US 1999-301511 A219990428 |
| | US 6617438 | В1 | 20030909 | US 1999-476387 19991230
US 1997-64866P P 19971105
US 1998-83727P P 19980429
US 1998-186675 A219981104
US 1999-301511 A219990428
US 1999-474432 A219991229 |
| | US 6509460 | B1 | 20030121 | US 2000-644966 20000823
US 1997-64866P P 19971105
US 1998-186675 A119981104 |
| | | A1 | 20030102 | US 2001-825805 20010404 US 1997-64866P P 19971105 US 1998-83727P P 19980429 US 1998-186675 A219981104 US 1999-301511 A219990428 US 1999-474432 A219991229 US 1999-476387 A219991230 US 2000-578223 A220000523 |
| FAN | 2003:512076
PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
| PI | US 2003125270
AU 9851819
AU 729657 | A1
A1
B2 | 20030703
19980611
20010208 | US 2000-740332 20001218
AU 1998-51819 19980112 |
| | AU 9939188 | A1 | 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713 |
| | US 2003125270 | A1 | 20030703 | AU 1995-26422 A319950518
US 2000-740332 20001218
US 2000-740332 A 20001218 |
| | US 2003171311 | A1 | 20030911 | US 2000-740332 A 20001210
US 2001-817879 20010326
US 1998-83217P P 19980427
US 1998-100842PP 19980918 |

| AU 9939
WO 2002
W: | 188
0814:
AE,
CO,
GM,
LS,
PL,
UA,
TJ,
GH,
CY,
BF, | AG,
CR,
HR,
LT,
PT,
UG,
TM
GM,
DE, | AL,
CU,
HU,
LU,
RO,
US,
KE,
DK, | AM,
CZ,
ID,
LV,
RU,
UZ,
LS,
CG, | 2002
AT,
DE,
IL,
MA,
SD,
VN, | 1017
AU,
DK,
IN,
MD,
SE,
YU,
MZ,
FR, | AZ,
DM,
IS,
MG,
SG,
ZA,
SD,
GB, | AU WO BA, DZ, JP, MK, SI, ZM, SL, GR, GN, US US US US | 1 28 BB EC KE MN SK ZW SZ IE GQ 20 20 20 20 | 002-
, B()
, K()
, M()
, S()
, A()
, T()
, T()
001-
001- | -US
G,
E,
G,
W,
L,
M,
-29
-87
-33 | 9187
BR,
ES,
KP,
MX,
TJ,
AZ,
UG,
LU,
ML,
7879
6876
7478
5059 | BY,
FI,
KR,
MZ,
TM,
BY,
MC,
MR,
A
SPP | 2002
BZ,
GB,
KZ,
NO,
TN,
KG, | 0326
CA,
GD,
LC,
NZ,
TR,
KZ,
AT,
PT,
SN,
0326
0608
0608 | GE,
LK,
OM,
TT,
MD,
BE,
SE, | GH,
LR,
PH,
TZ,
RU,
CH,
TR, |
|---------------------------------|--|---|--|--|--|--|--|---|--|---|---|--|---|--|---|--|--|
| AU 9939
WO 2002
W:
RW: | 188
08149
AE,
CO,
GM,
LS,
PL,
UA,
TJ,
GH,
CY,
BF, | AG,
CR,
HR,
LT,
PT,
UG,
TM
GM,
DE, | AL,
CU,
HU,
LU,
RO,
US,
KE,
DK, | AM,
CZ,
ID,
LV,
RU,
UZ, | 2002
AT,
DE,
IL,
MA,
SD,
VN, | 1017
AU,
DK,
IN,
MD,
SE,
YU,
MZ,
FR, | AZ,
DM,
IS,
MG,
SG,
ZA,
SD,
GB, | AU WO BA, DZ, JP, MK, SI, ZM, SL, GR, GN, US US US | 1
2
BB
EC
KE
MN
SK
ZW
SZ
20
20
20
20 | 002-
, E1
, K0
, M1
, S1
, A1
, T2
, GW | -US
G,
E,
G,
W,
L,
M,
-81
-29
-87 | 9187
BR,
ES,
KP,
MX,
TJ,
AZ,
UG,
LU,
ML,
7879
6876
7478
5059 | BY,
FI,
KR,
MZ,
TM,
BY,
MC,
MR, | 2002
BZ,
GB,
KZ,
NO,
TN,
KG,
ZW,
NL,
NE,
2001(2001(2001) | 0326
CA,
GD,
LC,
NZ,
TR,
KZ,
AT,
PT,
SN,
0326
0608
0608 | GE,
LK,
OM,
TT,
MD,
BE,
SE, | GH,
LR,
PH,
TZ,
RU,
CH,
TR, |
| AU 9939
WO 2002 | 188
0814:
AE,
CO,
GM,
LS, | AG,
CR,
HR,
LT, | AL,
CU,
HU,
LU, | AM,
CZ,
ID,
LV, | 2002:
AT,
DE,
IL,
MA, | 1017
AU,
DK,
IN,
MD, | AZ,
DM,
IS,
MG, | AU
WO
BA,
DZ,
JP,
MK, | 1
BB
EC
KE
MN | 002-
, B
, E
, K | -US
G,
E,
G,
W, | 9187
BR,
ES,
KP,
MX, | BY,
FI,
KR,
MZ, | 2002
BZ,
GB,
KZ,
NO, | 0326
CA,
GD,
LC,
NZ, | GE,
LK,
OM, | GH,
LR,
PH, |
| AU 9939 | 188 | 0.4 | | | | | | AU | 1 | | | | | | | | |
| AU 7296 | 57 | | | 1 | 1000 | | | | | 999 | -39 | 188 | | 1999 | 0713 | | |
| AU 9851 | | | | | | | | | | | | | | | | | |
| | | | | | | | | US
US
US
WC | 2 2 2 2 | 002
001
001
002 | -27
-29
-33
-US | 940:
6876
5059 | 1
6PP
9PP
7 A2 | 2001
2001
2002 | 0608
1024
0326 | | |
| PATENT | NO. | | | | | | | AF | PL | ICA | TIC | N NO | э. | | | | |
| | | | | | | | | ΑU | 1 | 995 | -26 | 422 | A3 | 31995 | 0518 | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | US | 3 2 | 000 | 1-74 | 1033 | 2 A | 2000 | 1218 | | |
| | | | - | | | | | | | | | | | | | | |
| | | | KI | ND | DATE | <u>.</u> | | | | | | | | | | 1 | |
| US 2003 | 31713 | 311 | Α | 1 | 2003 | 30911 | | U; | | 1999
2000
2000
2000
2001
2998
1999
2000 | 9-2
0-5
0-6
0-7
1-8
3-8
3-1
9-2
9-2
0-5
0-6 | 7455
0423
1193
4033
1787
3217
0084
5760
7455
0423 | 3 A
1 A
2 A
9 P P
2 P P
8 B
3 A
1 A | 21999
22000
22000
22000
1998
1998
21999
21999
22000
22000 | 90323
00215
00707
01218
10326
30427
30918
90225
90323
00215 | 3 5 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 | |
| | 2003:56 PATENT US 2003 AU 9851 AU 7296 AU 9939 US 2003:57 PATENT US 2003 AU 9851 | 2003:568525 PATENT NO. US 20031252 AU 9851819 AU 729657 AU 9939188 US 20031252 2003:570687 PATENT NO. US 20031403 | 2003:568525 PATENT NO | 2003:568525 PATENT NO. KI | 2003:568525 PATENT NO. KIND | 2003:568525 PATENT NO. KIND DATE | 2003:568525 PATENT NO. KIND DATE US 2003125270 A1 20030703 AU 9851819 A1 19980611 AU 729657 B2 20010208 AU 9939188 A1 19990916 US 2003125270 A1 20030703 2003:570687 PATENT NO. KIND DATE US 2003140362 A1 20030724 AU 9851819 A1 19980611 AU 729657 B2 20010208 | PATENT NO. KIND DATE | US 2003171311 A1 20030911 U3 2003:568525 PATENT NO. KIND DATE AI US 2003125270 A1 20030703 U3 AU 9851819 A1 19980611 AU AU 729657 B2 20010208 US 2003125270 A1 20030703 U3 US 2003125270 A1 20030704 U3 US 2003125270 A1 20030704 U3 US 2003140362 A1 20030724 U3 AU 9851819 A1 19980611 AU AU 9851819 A1 19980611 AU AU 729657 B2 20010208 | US 2003171311 A1 20030911 US 2 US 2003171311 A1 20030911 US 2 US 2 US 2 2003:568525 PATENT NO. KIND DATE APPI | US 1999 US 2000 US 1998 US 1998 US 1998 US 1998 US 1998 US 1998 US 2000 US 2001 | US 1999-2 US 2000-5 US 2000-6 US 2000-7 US 2001-8 US 1998-8 US 1998-1 US 1999-2 US 1999-2 US 2000-5 US 2000-5 US 2000-6 US 2000-5 US 2000-6 US 2000-7 US 2000-7 US 2003125270 A1 20030703 US 2000-7 AU 9851819 A1 19980611 AU 1998-51 AU 729657 AU 2003125270 A1 20030703 US 2000-7 AU 9939188 A1 19990916 AU 1999-3 US 2001-29 US 2003140362 AU 9851819 A1 19980611 AU 1995-26 US 2001-29 US 200 | US 1999-27455 US 2000-50423 US 2000-61193 US 2001-81787 US 1998-83217 US 1998-10084 US 1999-27455 US 2000-50423 US 2000-74033 US 2001-81787 US 1998-10084 US 1999-27455 US 2000-50423 US 2000-50423 US 2000-50423 US 2000-61193 US 2000-74033 US 2000-74033 US 2000-74033 AU 9851819 AI 19980611 AU 1998-51819 AU 9939188 AI 19990916 AU 1999-39188 AU 1995-26422 US 2003125270 AI 20030703 US 2000-74033 US 2001-74033 | US 1999-274553 A | US 1999-274553 A2199: US 2000-504231 A22000 US 2000-611931 A22000 US 2000-740332 A22000 US 2000-817879 2000 US 1998-83217P P 1998 US 1999-274553 A21999 US 1998-100842PP 1998 US 1999-274553 A21999 US 1999-274553 A21999 US 1999-274553 A21999 US 2000-504231 A22000 US 2000-611931 A22000 US 2000-740332 A2000 AU 9851819 A1 19980611 AU 1998-51819 1998 AU 9939188 A1 19990916 AU 1999-39188 1999 US 2003125270 A1 20030703 US 2000-740332 2000 US 2003140362 A1 20030703 US 2000-740332 2000 US 2003140362 A1 20030724 US 2002-279401 2002 US 2001-296876PP 2001 US 2003140362 A1 19980611 AU 1998-51819 1998 AU 9939188 A1 19980611 AU 1998-51819 1998 AU 9939188 A1 19990916 AU 1999-39188 1999 | US 1999-274553 A219990323 US 2000-504231 A220000215 US 2000-740332 A220001218 US 2001-817879 20010326 US 1998-83217P P 19980427 US 1998-100842PP 19980912 US 1999-274553 A219990323 US 1999-274553 A219990323 US 1999-274553 A219990323 US 1999-274553 A219990225 US 1999-274553 A219990323 US 2000-504231 A220000215 US 2000-504231 A2200007218 US 2000-611931 A220000707 US 2000-740332 A220001218 US 2000-740332 A220001218 US 2000-740332 A20001218 US 2000-740332 A20001218 AU 9851819 A1 19980611 AU 1998-51819 19980112 AU 729657 B2 20010208 AU 9939188 A1 19990916 AU 1999-39188 19990713 AU 1995-26422 A319950518 US 2003125270 A1 20030703 US 2000-740332 20001218 US 2006-740332 A200020326 | US 1998-83217P P 19980427 US 1998-100842PP 19980918 US 1999-257608 B219990225 US 1999-274553 A219990323 US 2000-504231 A220000215 US 2000-611931 A220000707 US 2000-740332 A220001218 2003:568525 PATENT NO. KIND DATE APPLICATION NO. DATE US 2003125270 A1 20030703 US 2000-740332 20001218 AU 9851819 A1 19980611 AU 1998-51819 19980112 AU 729657 B2 20010208 AU 9939188 A1 19990916 AU 1999-39188 19990713 AU 1995-26422 A319950518 US 2003125270 A1 20030703 US 2000-740332 20001218 US 2001-296876PP 20010608 US 2001-296876PP 20010608 US 2001-335059PP 20011024 WO 2002-US9187 A220020326 AU 9851819 A1 19980611 AU 729657 B2 20010208 US 1996-623891 A 19960325 |

```
US 1997-68212P P 19971219
                                                      US 1998-94381 A319980609
                                                      US 1998-216584 A319981218
                                                      US 2002-112814 A220020329
                    A1
                                   19980611
      AU 9851819
                                                      AU 1998-51819
                                                                           19980112
      AU 729657
                            B2
                                   20010208
                                                     US 1996-623891 A 19960325
                                   20030625
                                                     EP 2003-2270 19980505
      EP 1321521
                          A1
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                IE, FI, CY
                                                      US 1997-46059P P 19970509
                                                      US 1997-49002P P 19970609
                                                      US 1997-51718P P 19970703
                                                      US 1997-56808P P 19970822
                                                      US 1997-61321P P 19971002
                                                      US 1997-61324P P 19971002
                                                      US 1997-64866P P 19971105
                                                      US 1997-68212P P 19971219
                                                      EP 1998-920299 A319981112
                                                      US 1998-94381
      US 6280936
                            В1
                                 20010828
                                                                         19980609
                                                      US 1997-49002P P 19970609
      US 6548657
                            В1
                                   20030415
                                                      US 1998-216584 19981218
                                                      US 1997-49002P P 19970609
                                                      US 1997-68212P P 19971219
                                                      US 1998-94381 A219980609
                                                      AU 1999-39188
                                                                        19990713
      AU 9939188
                            A1
                                   19990916
                                                      AU 1995-26422 A319950518
                                                      US 2002-112814 20020329
      US 2003170644
                                   20030911
                            A1
                                                      US 1997-49002P P 19970609
                                                      US 1997-68212P P 19971219
                                                      US 1998-94381 A319980609
                                                      US 1998-216584 A319981218
FAN
     2003:678623
                                                    APPLICATION NO. DATE
                           KIND DATE
      PATENT NO.
                                                     ______
       ______
                                                   WO 2003-US5190 20030220
      WO 2003070193
                          A2
                                   20030828
PΙ
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
           RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
                ML, MR, NE, SN, TD, TG
                                                      US 2001-294140PP 20010529
                                                      US 2002-358580PP 20020220
                                                      US 2002-363124PP 20020311
                                                      US 2002-374722PP 20020422
                                                      US 2002-157580 A120020529
                                                      US 2002-386782PP 20020606
                                                      US 2002-398036PP 20020723
                                                      US 2002-225023 A120020821
                                                      US 2002-406784PP 20020829
                                                      US 2002-408378PP 20020905
```

| | | | | | | | | | | | 2002
2003 | | | |
|-----|----------------------|-------------|----------|------------------------|-----|-----|--------------|----------|----------|--------|----------------------|------|------|------|
| | AU 98518
AU 72965 | | A1
B2 | 19980611
20010208 | | A | U 19 | 98-5 | 1819 | | 1998 | 0112 | | |
| | AU 99391 | 188 | A1 | 19990916 | | Α | U 19 | 99-3 | 9188 | | 1996
1999 | 0713 | | |
| | US 20031 | 24513 | A1 | 20030703 | | U | U 19
S 20 | 02-1 | 5758 | 0 | 31995
2002 | 0529 | | |
| | US 20031 | 75950 | A1 | 20030918 | | U | S 20 | 02-2 | 2502 | 3 | 2001
2002
2001 | 0821 | | |
| | | | | | | | | | | | 2002
2002 | | | |
| FAN | 2003:678
PATENT N | | KIND | DATE | | A | PPLI | CATI | ON N | ο. | DATE | | | |
| ΡI | WO 20030 | 70197 | | 20030828 | | W |
O 20 |
03−℧ |
s727 |
3 | 2003 | 0211 | | |
| | | | | , AT, AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | | | | |
| | | | | , DE, DK,
, IL, IN, | | | | | | | | | | |
| | | LS, LT, | LU, LV | , MA, MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, |
| | | | | , SC, SD,
, VC, VN, | | | | | | | | | | |
| | | RU, TJ, | | , MW, MZ, | a D | СT | C 7 | m 7 | IIC | 7M | 75.7 | 7.00 | ישנו | D.C. |
| | | | | , MW, MZ,
, DK, EE, | | | | | | | | | | |
| | | | | , SK, TR,
, TD, TG | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, |
| | | riis, riiv, | NH, SN, | , 10, 19 | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2002
2002 | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | U: | s 20 | 03-4 | 4012 | 9PP | 2003 | 0115 | | |
| | AU 98518
AU 72965 | | A1
B2 | 19980611
20010208 | | | U 19: | | | | 1998
1996 | | | |
| | AU 99391 | 88 | A1 | 19990916 | | Αl | J 19 | 99-3 | 9188 | | 1999 | 0713 | | |
| FAN | 2003:678 | 821 | | | | Αl | J 19: | 95-2 | 6422 | A3 | 1995 | 0518 | | |
| | PATENT N | 0. | KIND | DATE | | A1 | PPLI | CATI | ON NO | o.
 | DATE | | | |
| PI | WO 20030 | | A1 | 20030828 | | | 20 | | | | 2003 | | | |
| | | | | AT, AU,
DE, DK, | | | | | | - | • | | | - |
| | | | | IL, IN, | | | | | | | | | | |
| | | | | , MA, MD, | | | | | | | | | | |
| | | | | SC, SD, VC, VN, | | | | | | | | | | |
| | | RU, TJ, | TM | | | | | | | | | | | |
| | | | | , MW, MZ, | | | | | | | | | | |
| | | | | DK, EE,
SK, TR, | | | | | | | | | | |
| | | | | TD, TG | • | | | | | | | | | • |
| | | | | | | បន | 5 ∠U(| UZ-3: | 28580 |) P.B | 20020 | 1220 | | |

```
US 2002-363124PP 20020311
                                               US 2002-386782PP 20020606
                                               US 2002-396600PP 20020717
                                               US 2002-406784PP 20020829
                                               US 2002-408378PP 20020905
                                               US 2002-409293PP 20020909
                                               US 2003-440129PP 20030115
                         A1
                              19980611
                                               AU 1998-51819
                                                                 19980112
     AU 9851819
                              20010208
     AU 729657
                         В2
                                               US 1996-623891 A 19960325
                                               AU 1999-39188 19990713
     AU 9939188
                         A1
                              19990916
                                               AU 1995-26422 A319950518
FAN
     2003:678822
                      KIND DATE
                                             APPLICATION NO. DATE
     PATENT NO.
     _______
                                              _____
     WO 2003070743
                       A1
                              20030828
                                             WO 2003-US4397
                                                                  20030213
PT
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                               US 2002-358580PP 20020220
                                               US 2002-363124PP 20020311
                                               US 2002-386782PP 20020606
                                               US 2002-406784PP 20020829
                                               US 2002-408378PP 20020905
                                               US 2002-409293PP 20020909
                                               US 2002-431105PP 20021205
                                               US 2003-440129PP 20030115
                                               AU 1998-51819
     AU 9851819
                         A1
                              19980611
                                                                  19980112
     AU 729657
                         B2
                              20010208
                                               US 1996-623891 A 19960325
                                               AU 1999-39188 19990713
     AU 9939188
                       A1
                              19990916
                                               AU 1995-26422 A319950518
     2003:678823
                       KIND DATE
                                              APPLICATION NO. DATE
     PATENT NO.
                       ____
                                               _____
                                              WO 2003-US4566
                                                                 20030211
     WO 2003070744
                       A1
                              20030828
PΙ
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                               US 2002-358580PP 20020220
                                               US 2002-363124PP 20020311
```

```
US 2002-386782PP 20020606
                                              US 2002-406784PP 20020829
                                              US 2002-408378PP 20020905
                                              US 2002-409293PP 20020909
                                              US 2003-440129PP 20030115
      AU 9851819
                         A1
                              19980611
                                              AU 1998-51819
                                                                 19980112
      AU 729657
                         B2
                              20010208
                                              US 1996-623891 A 19960325
      AU 9939188
                         A1
                              19990916
                                              AU 1999-39188
                                              AU 1995-26422 A319950518
FAN
     2003:678829
     PATENT NO.
                        KIND
                              DATE
                                              APPLICATION NO. DATE
                              _____
PI
     WO 2003070750
                       A2
                              20030828
                                            WO 2003-US5043
                                                                20030220
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                              US 2002-358580PP 20020220
                                              US 2002-363124PP 20020311
                                              WO 2002-US9187 A 20020326
                                              US 2002-386782PP 20020606
                                              US 2002-401104PP 20020805
                                              US 2002-406784PP 20020829
                                              US 2002-408378PP 20020905
                                              US 2002-409293PP 20020909
                                              US 2003-440129PP 20030115
     AU 9851819
                        A1
                              19980611
                                              AU 1998-51819
                                                                19980112
     AU 729657
                        В2
                              20010208
                                              US 1996-623891 A 19960325
     AU 9939188
                        A1
                              19990916
                                              AU 1999-39188
                                                              19990713
                                              AU 1995-26422 A319950518
     WO 2002081494
                              20021017
                        A1
                                              WO 2002-US9187 20020326
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
              TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
              CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                             US 2001-817879 A 20010326
                                              US 2001-296876PP 20010608
                                             US 2001-877478 A 20010608
                                             US 2001-335059PP 20011024
                                             US 2001-337055PP 20011205
FAN 2003:678932
     PATENT NO.
                   KIND DATE
                                             APPLICATION NO.
```

| PI | WO 2003 | 070881 | A2 | 20030828 | | W | 200 |)3-US | 412 | 3 | 2003 | 0211 | | |
|------|--------------------|-------------|---------|-----------|-----|-----|--------|----------------|-------|----------|--------------|---------|-------|-----|
| | W: | | | AT, AU, | Δ7. | | | | | | | | CH. | CN, |
| | | | | DE, DK, | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | IL, IN, | | | | | | | | | | |
| | | | | MA, MD, | | | | | | | | | | |
| | | | | SC, SD, | | | | | | | | | | |
| | | UA, UG, | US, UZ, | VC, VN, | YU, | ZA, | ZM, | ZW, | ΑM, | ΑZ, | BY, | KG, | ΚZ, | MD, |
| | | RU, TJ, | TM | | | | | | | | | | | |
| | RW: | GH, GM, | KE, LS, | MW, MZ, | SD, | SL, | SZ, | TZ, | ŪG, | ZM, | ZW, | AT, | BE, | ΒG, |
| | | | | DK, EE, | | | | | | | | | | |
| | | | | SK, TR, | | | | | | | | | | |
| | | | NE, SN, | - | , | , | , | , | , | , | , | , | - 2.7 | |
| | | PILL, PILL, | NE, SN, | 10, 10 | | TT | g 200 | 12-35 | 8581 | ηpp | 2002 | กรรก | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | U: | s 200 | 02-40 | 929: | 3PP | 2002 | 0909 | | |
| | | | | | | ប | s 200 | 03-44 | 012 | 9PP | 2003 | 0115 | | |
| | AU 9851 | 819 | A1 | 19980611 | | A | J 199 | 98-51 | 819 | | 1998 | 0112 | | |
| | AU 7296 | | B2 | 20010208 | | | | | | | | | | |
| | 110 /0 | • . | | | | U: | s 199 | 96-62 | 389 | 1 A | 1996 | 0325 | | |
| | AU 9939 | 188 | A1 | 19990916 | | | | 99-39 | | | 1999 | | | |
| | A0 3333 | 100 | 711 | 10000010 | | | | | | Α3 | 1995 | | | |
| FAN | 2003:67 | 8035 | | | | 11 | 0 13. | 75 20 | 122 | 2 10 | .1330 | 0010 | | |
| E AM | PATENT | | KIND | DATE | | 70. | DDT.T | CATIO | NI NI | 1 | DATE | | | |
| | EALENI | | KIND | | | | | | | | | | | |
| PI | WO 2003 | 070884 | A2 | 20030828 | | W | 200 |)3-US | 425 | n | 2003 | 0213 | | |
| ΕT | WC 2003 | | | AT, AU, | 7.7 | | | | | | | | CH- | CN, |
| | VV . | | | DE, DK, | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | IL, IN, | | | | | | | | | | |
| | | | | MA, MD, | | | | | | | | | | |
| | | | | SC, SD, | | | | | | | | | | |
| | | UA, UG, | US, UZ, | , VC, VN, | YU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG, | KZ, | MD, |
| | | RU, TJ, | | | | | | | | | | | | |
| | RW: | | | , MW, MZ, | | | | | | | | | | |
| | | | | DK, EE, | | | | | | | | | | |
| | | NL, PT, | SE, SI, | SK, TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, |
| | | ML, MR, | NE, SN | , TD, TG | | | | | | | | | | |
| | | | | | | U | S 200 | 02-35 | 858 | OPP | 2002 | 0220 | | |
| | | | | | | U | S 200 | 02-36 | 312 | 4PP | 2002 | 0311 | | |
| | | | | | | U | S 200 | 02-38 | 678 | 2PP | 2002 | 0606 | | |
| | | | | | | U. | S 200 | 02-40 | 678 | 4PP | 2002 | 0829 | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | 2003 | | | |
| | 711 OOE 1 | 010 | 7. 7 | 10000611 | | | | 98-51 | | | 1998 | | | |
| | AU 9851 | | A1 | 19980611 | | A | O T3; | 20-21 | .отЭ | | 1220 | O T T Z | | |
| | AU 7296 | J / | B2 | 20010208 | | ** | d 104 | 06 (0 | 200 | 1 7 | 1000 | กววต | | |
| | | | 3.7 | 100000 | | | | | | | 1996 | | | |
| | | 100 | | 19990916 | | A. | O T 28 | 99-39 | TAA | | 1999 | ひノエろ | | |
| | AU 9939 | 188 | A1 | 10330010 | | _ | | AF A- | | _ ~ | 100- | 0 - 1 0 | | |
| | | | AI | 10330010 | | A | U 199 | 95-26 | 5422 | A3 | 1995 | 0518 | | |
| FAN | AU 9939
2003:67 | | | | | | | | | | | 0518 | | |
| FAN | | 8936 | KIND | DATE | | | | 95-26
CATIC | | | 1995
DATE | 0518 | | |
| FAN | 2003:67 | 8936 | | | | | | | | | | 0518 | | |

```
WO 2003070885
                        A2
                               20030828
                                               WO 2003-US4317
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                               US 2002-358580PP 20020220
                                               US 2002-363124PP 20020311
                                               US 2002-386782PP 20020606
                                               US 2002-406784PP 20020829
                                               US 2002-408378PP 20020905
                                               US 2002-409293PP 20020909
                                               US 2002-412304PP 20020920
                                               US 2003-440129PP 20030115
                              19980611
                                               AU 1998-51819
                                                                 19980112
     AU 9851819
                         A1
     AU 729657
                         В2
                              20010208
                                               US 1996-623891 A 19960325
                                               AU 1999-39188 19990713
     AU 9939188
                       A1
                              19990916
                                               AU 1995-26422 A319950518
FAN
    2003:678937
                      KIND DATE
                                             APPLICATION NO. DATE
     PATENT NO.
                             -----
                                          WO 2003-US4347 20030211
     WO 2003070886 A2
                              20030828
PI
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                               US 2002-358580PP 20020220
                                               US 2002-363124PP 20020311
                                               US 2002-386782PP 20020606
                                               US 2002-406784PP 20020829
                                               US 2002-408378PP 20020905
                                               US 2002-409293PP 20020909
                                               US 2003-440129PP 20030115
                               19980611
                                               AU 1998-51819
                                                                  19980112
     AU 9851819
                         A1
     AU 729657
                         B2
                               20010208
                                               US 1996-623891 A 19960325
                       A1
                               19990916
                                               AU 1999-39188 19990713
     AU 9939188
                                               AU 1995-26422 A319950518
    2003:678938
FAN
                        KIND DATE
                                               APPLICATION NO. DATE
     PATENT NO.
                                               _____
                              _____
                                             WO 2003-US4402 20030213
                              20030828
     WO 2003070887
                       A2
PI
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
```

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                           US 2002-358580PP 20020220
                                           US 2002-363124PP 20020311
                                           US 2002-386782PP 20020606
                                           US 2002-406784PP 20020829
                                           US 2002-408378PP 20020905
                                           US 2002-409293PP 20020909
                                           US 2002-427467PP 20021119
                                           US 2003-440129PP 20030115
     AU 9851819
                       A1
                            19980611
                                          AU 1998-51819
                                                            19980112
     AU 729657
                       B2
                            20010208
                                          US 1996-623891 A 19960325
     AU 9939188
                      A1
                            19990916
                                          AU 1999-39188 19990713
                                          AU 1995-26422 A319950518
FAN
    2003:678939
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                           _____
     ______
                     ____
                                          ______
ΡI
     WO 2003070888
                     A2
                            20030828
                                          WO 2003-US4448 20030213
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
            CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
            NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
            ML, MR, NE, SN, TD, TG
                                          US 2002-358580PP 20020220
                                          US 2002-363124PP 20020311
                                          US 2002-386782PP 20020606
                                          US 2002-401093PP 20020805
                                          US 2002-406784PP 20020829
                                          US 2002-408378PP 20020905
                                          US 2002-409293PP 20020909
                                          US 2003-440129PP 20030115
    AU 9851819
                      A1
                           19980611
                                          AU 1998-51819
                                                           19980112
    AU 729657
                      В2
                           20010208
                                          US 1996-623891 A 19960325
    AU 9939188
                      A1
                           19990916
                                          AU 1999-39188
                                                           19990713
                                          AU 1995-26422 A319950518
FAN
    2003:678945
     PATENT NO.
                     KIND
                           DATE
                                          APPLICATION NO. DATE
                     ____
    WO 2003070895
                     A2
                           20030828
PI
                                          WO 2003-US4710
                                                           20030218
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
```

```
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                              US 2002-358580PP 20020220
                                              US 2002-363124PP 20020311
                                              US 2002-386782PP 20020606
                                              US 2002-205309 A 20020725
                                              US 2002-406784PP 20020829
                                              US 2002-408378PP 20020905
                                              US 2002-409293PP 20020909
                                              US 2003-440129PP 20030115
     AU 9851819
                        A1
                              19980611
                                             AU 1998-51819
                                                               19980112
     AU 729657
                        В2
                              20010208
                                             US 1996-623891 A 19960325
     AU 9939188
                        A1
                              19990916
                                             AU 1999-39188 19990713
                                             AU 1995-26422 A319950518
     US 2003190635
                        A1
                             20031009
                                             US 2002-205309 20020725
                                             US 2002-358580PP 20020220
                                             US 2002-363124PP 20020311
                                             US 2002-386782PP 20020606
FAN
    2003:678946
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
     -----
                      ----
                                             ______
                                         WO 2003-US4738 20030218
PΙ
     WO 2003070896
                      A2
                             20030828
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                             US 2002-358580PP 20020220
                                             US 2002-363124PP 20020311
                                             US 2002-386782PP 20020606
                                             US 2002-406784PP 20020829
                                             US 2002-408378PP 20020905
                                             US 2002-409293PP 20020909
                                             US 2002-409785PP 20020911
                                             US 2003-440129PP 20030115
     AU 9851819
                             19980611
                        Α1
                                             AU 1998-51819
                                                               19980112
     AU 729657
                        B2
                             20010208
                                             US 1996-623891 A 19960325
     AU 9939188
                      A1
                             19990916
                                             AU 1999-39188 19990713
                                             AU 1995-26422 A319950518
FAN
    2003:678947
     PATENT NO.
                  KIND DATE
                                             APPLICATION NO. DATE
                                             -----
```

```
PΙ
     WO 2003070897
                        A2
                              20030828
                                             WO 2003-US4741
                                                              20030220
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU. TJ. TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                              US 2002-358580PP 20020220
                                              US 2002-363124PP 20020311
                                             US 2002-386782PP 20020606
                                              US 2002-406784PP 20020829
                                              US 2002-408378PP 20020905
                                              US 2002-409293PP 20020909
                                             US 2002-429359PP 20021128
                                             US 2003-440129PP 20030115
     AU 9851819
                        A1
                             19980611
                                             AU 1998-51819
                                                               19980112
     AU 729657
                        B2
                             20010208
                                             US 1996-623891 A 19960325
     AU 9939188
                        A1
                             19990916
                                             AU 1999-39188 19990713
                                             AU 1995-26422 A319950518
FAN
    2003:678952
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO. DATE
     ______
                       ____
                                             _____
                                         WO 2003-US4909 20030218
PI
     WO 2003070903
                      A2 20030828
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                             US 2002-358580PP 20020220
                                             US 2002-363124PP 20020311
                                             US 2002-386782PP 20020606
                                             US 2002-406784PP 20020829
                                             US 2002-408378PP 20020905
                                             US 2002-409293PP 20020909
                                             US 2003-440129PP 20030115
     AU 9851819
                        A1
                             19980611
                                             AU 1998-51819
                                                               19980112
     AU 729657
                        B2
                             20010208
                                             US 1996-623891 A 19960325
     AU 9939188
                       A1
                             19990916
                                             AU 1999-39188 19990713
                                             AU 1995-26422 A319950518
FAN
    2003:678957
     PATENT NO.
                       KIND
                             DATE
                                             APPLICATION NO. DATE
     ______
                                             ______
     WO 2003070910 A2
PI
                             20030828
                                           WO 2003-US5022 20030220
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
```

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
         GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
         LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
         PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
         UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
         RU, TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
         CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
         NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
        ML, MR, NE, SN, TD, TG
                                        US 2002-358580PP 20020220
                                        US 2002-363124PP 20020311
                                        WO 2002-US17674A120020529
                                        US 2002-386782PP 20020606
                                        US 2002-393796PP 20020703
                                        US 2002-399348PP 20020729
                                        US 2002-406784PP 20020829
                                        US 2002-408378PP 20020905
                                        US 2002-409293PP 20020909
                                        US 2002-287949 A120021104
                                        US 2002-306747 A120021127
                                        US 2003-440129PP 20030115
AU 9851819
                   A1
                        19980611
                                        AU 1998-51819
                                                          19980112
AU 729657
                   B2
                        20010208
                                        US 1996-623891 A 19960325
AU 9939188
                   A1
                        19990916
                                        AU 1999-39188
                                                          19990713
                                        AU 1995-26422 A319950518
WO 2002096927
                        20021205
                  A2
                                        WO 2002-US17674 20020529
WO 2002096927
                  AЗ
                        20030220
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
        GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
        PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
        UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
        TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
        CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                       US 2001-870161 A 20010529
                                        US 2001-334461PP 20011130
                                        US 2002-138674 A 20020503
US 2003216335
                        20031120
                  A1
                                        US 2002-306747
                                                         20021127
                                        US 2001-334461PP 20011130
2003:678958
PATENT NO.
                 KIND
                        DATE
                                       APPLICATION NO.
                                                         DATE
WO 2003070911
                        20030828
                                       WO 2003-US5044
                  A2
                                                         20030220
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
        GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
        PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
        UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
        RU, TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
        CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
```

FAN

PΙ

```
NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
               ML, MR, NE, SN, TD, TG
                                                 US 2002-358580PP 20020220
                                                 US 2002-363124PP 20020311
                                                 US 2002-386782PP 20020606
                                                 US 2002-406784PP 20020829
                                                 US 2002-408378PP 20020905
                                                 US 2002-409293PP 20020909
                                                 US 2003-440129PP 20030115
     AU 9851819
                          A1
                                19980611
                                                 AU 1998-51819
                                                                    19980112
     AU 729657
                          B2
                                20010208
                                                 US 1996-623891 A 19960325
     AU 9939188
                        A1
                                                 AU 1999-39188
                                19990916
                                                 AU 1995-26422 A319950518
     2003:678959
FAN
     PATENT NO.
                         KIND
                                DATE
                                                APPLICATION NO. DATE
                                _____
                                                 ______
     WO 2003070912
                                            WO 2003-US5045 20030220
PΙ
                        A2
                                20030828
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                                 US 2001-296249PP 20010606
                                                 US 2001-916466 A 20010725
                                                 US 2002-358580PP 20020220
                                                 US 2002-363124PP 20020311
                                                 WO 2002-US16840A120020529
                                                 US 2002-163552 A120020606
                                                 US 2002-386782PP 20020606
                                                 US 2002-393924PP 20020703
                                                US 2002-406784PP 20020829
                                                US 2002-408378PP 20020905
                                                US 2002-409293PP 20020909
                                                US 2002-251117 A120020919
                                                US 2002-277494 A120021021
                                                US 2003-440129PP 20030115
     AU 9851819
                               19980611
                         Α1
                                                AU 1998-51819
                                                                    19980112
     AU 729657
                         B2
                               20010208
                                                US 1996-623891 A 19960325
     AU 9939188
                         A1
                               19990916
                                                AU 1999-39188 19990713
                                                AU 1995-26422 A319950518
                               20030403
     US 2003064945
                         A1
                                                US 2001-916466 20010725
                                                US 1997-36476P P 19970131
                                                US 1997-985162 A119971204
                                                US 1999-401063 A219990922
                                                US 2001-848754 A220010503
     WO 2002097114
                               20021205
                         A2
                                                WO 2002-US16840 20020529
     WO 2002097114
                         A3
                               20030508
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
```

```
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                          US 2001-294140PP 20010529
                                          US 2001-296249PP 20010606
                                          US 2001-318471PP 20010910
     US 2003105051
                      A1
                           20030605
                                          US 2002-163552 20020606
                                          US 2001-296249PP 20010606
     US 2003170891
                    A1
                           20030911
                                          US 2002-251117
                                                         20020919
                                          US 2001-296249PP 20010606
                                          US 2001-916466 A220010725
                                          US 2002-358580PP 20020220
                                          US 2002-163552 A220020606
                                          US 2002-393924PP 20020703
     US 2003186909
                      A1
                           20031002
                                          US 2002-277494 20021021
                                          US 1997-36749P P 19970127
                                          US 1997-985162 A119971204
                                          US 1999-401063 A119990922
                                          US 2001-848754 A220010503
                                          US 2001-916466 A120010725
FAN
    2003:678961
     PATENT NO.
                     KIND DATE
                                        APPLICATION NO. DATE
                     ----
                                         A2 20030828 WO 2003-US5162 20030220
     WO 2003070914
PΙ
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
            CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
            NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW,
            ML, MR, NE, SN, TD, TG
                                          US 2002-358580PP 20020220
                                          US 2002-363124PP 20020311
                                          US 2002-386782PP 20020606
                                          US 2002-406784PP 20020829
                                          US 2002-408378PP 20020905
                                          US 2002-409293PP 20020909
                                          US 2003-440129PP 20030115
    AU 9851819
                      A1
                           19980611
                                         AU 1998-51819
                                                         19980112
    AU 729657
                      B2
                           20010208
                                         US 1996-623891 A 19960325
    AU 9939188
                      A1
                           19990916
                                         AU 1999-39188 19990713
                                         AU 1995-26422 A319950518
FAN
    2003:678963
    PATENT NO.
                     KIND
                                         APPLICATION NO. DATE
                           _____
                                        WO 2003-US5326 20030220
PΙ
    WO 2003070917
                    A2
                           20030828
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
```

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
            ML, MR, NE, SN, TD, TG
                                           US 2002-358580PP 20020220
                                           US 2002-363124PP 20020311
                                           US 2002-386782PP 20020606
                                           US 2002-406784PP 20020829
                                           US 2002-408378PP 20020905
                                           US 2002-409293PP 20020909
                                           US 2002-418655PP 20021015
                                           US 2003-440129PP 20030115
    AU 9851819
                      A1
                           19980611
                                          AU 1998-51819
                                                           19980112
    AU 729657
                      В2
                           20010208
                                          US 1996-623891 A 19960325
    AU 9939188
                      A1
                           19990916
                                          AU 1999-39188 19990713
                                          AU 1995-26422 A319950518
FAN
    2003:678964
    PATENT NO.
                     KIND
                           DATE
                                          APPLICATION NO. DATE
     ______
                     ____
                           _____
                                          WO 2003070918
PΙ
                     A2
                           20030828
                                          WO 2003-US5346 20030220
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
            RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
            CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
            NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
            ML, MR, NE, SN, TD, TG
                                          US 2002-358580PP 20020220
                                          US 2002-358580PP 20020220
                                          US 2002-336124PP 20020311
                                          US 2002-363124PP 20020311
                                          US 2002-386782PP 20020606
                                          US 2002-386782PP 20020606
                                          US 2002-406784PP 20020829
                                          US 2002-406784PP 20020829
                                          US 2002-408378PP 20020905
                                          US 2002-408378PP 20020905
                                          US 2002-409293PP 20020909
                                          US 2002-409293PP 20020909
                                          US 2003-440129PP 20030115
                                          US 2003-440129PP 20030115
    AU 9851819
                           19980611
                      Α1
                                          AU 1998-51819
                                                           19980112
    AU 729657
                      B2
                           20010208
                                          US 1996-623891 A 19960325
    AU 9939188
                      Α1
                           19990916
                                          AU 1999-39188
                                                           19990713
                                          AU 1995-26422 A319950518
```

| FAN | | 3:67
ENT | | | KI | ND | DATE | | | | PPLI | | | | DATE | | | |
|-----|--------------|--------------------------------|---|---|---|---|---|---|---|---|---|--|--|---|---|---|---|---------------------------------|
| PI | WO 2 | 2003
W: | AE,
CO,
GM,
LS,
PL, | AG,
CR,
HR,
LT,
PT,
UG, | AL,
CU,
HU,
LU,
RO,
US, | AM,
CZ,
ID,
LV,
RU, | 2003
AT,
DE,
IL,
MA,
SC,
VC, | O828
AU,
DK,
IN,
MD,
SD, | AZ,
DM,
IS,
MG,
SE, | BA,
DZ,
JP,
MK,
SG, | EC,
KE,
MN,
SK, | 03-U
BG,
EE,
KG,
MW,
SL, | S446
BR,
ES,
KP,
MX,
TJ, | BY,
FI,
KR,
MZ,
TM, | 2003
BZ,
GB,
KZ,
NO, | GD,
LC,
NZ,
TR, | CH,
GE,
LK,
OM, | GH,
LR,
PH,
TZ, |
| | | RW: | GH,
CH,
NL, | GM,
CY,
PT, | KE,
CZ,
SE, | DE,
SI, | MW,
DK,
SK,
TD, | EE,
TR, | ES, | FI,
BJ, | FR,
CF, | GB,
CG, | GR,
CI, | HU,
CM, | IE,
GA, | IT,
GN, | LU, | MC. |
| | AU 9
AU 7 | | | | A
B: | | 1998(
2001(| | | U
U
U
U
U
U
A | S 200
S 200
S 200
S 200
S 200
S 200
S 200
S 200
U 199 | 02-30
02-40
02-40
02-40
02-40
02-40
03-44
98-53 | 6312
8678
0299
0678
0837
0929
4012
1819 | 4PP
2PP
6PP
4PP
8PP
3PP | 2002
2002
2002
2002
2002
2002
2003
1998 | 0311
0606
0813
0829
0905
0909
0115
0112 | | |
| | AU 9 | 9391 | 188 | | A | 1 : | 19990 | 0916 | | A | S 199
U 199 | 99-39 | 9188 | | 1999 | 0713 | | |
| FAN | 2003 | . 670 | | | | | | | | Αl | J 199 |) 5-26 | 5422 | A3 | 1995 | 0518 | | |
| | | | | | KTI | ו מע | DATE. | | | Δì | PPT.T | ጉ ⊅ጥፐ <i>ር</i> | או אור | ` | חאשב | | | |
| РΤ | PATE | NT N | io. | | KII
 | | DATE | | | | PPLIC | | | | DATE | | | |
| PI | PATE
WO 2 | ENT N

0030
W: | O7096
AE,
CO,
GM,
LS,
PL,
UA,
RU,
GH, | AG,
CR,
HR,
LT,
PT,
UG,
TJ,
GM, | AL,
CU,
HU,
LU,
RO,
US,
TM | AM,
CZ,
ID,
LV,
RU,
UZ, | DE,
IL,
MA,
SC,
VC, | AU,
DK,
IN,
MD,
SD,
VN, | DM,
IS,
MG,
SE,
YU, | BA,
DZ,
JP,
MK,
SG,
ZA, | BB,
EC,
KE,
MN,
SK,
ZM, | BG,
EE,
KG,
MW,
SL,
ZW, | BR,
ES,
KP,
MX,
TJ,
AM, | BY,
FI,
KR,
MZ,
TM,
AZ, | 2003
BZ,
GB,
KZ,
NO,
TN,
BY, | CA,
GD,
LC,
NZ,
TR,
KG, | GE,
LK,
OM,
TT,
KZ, | GH,
LR,
PH,
TZ,
MD, |
| PI | PATE
WO 2 | ENT N

0030
W:
RW: | O. | AG,
CR,
HR,
LT,
PT,
UG,
TJ,
GM,
CY, | AL,
CU,
HU,
LU,
RO,
US,
TM
KE,
CZ,
SE, | AM,
CZ,
ID,
LV,
RU,
UZ,
LS,
DE, | 20030
AT,
DE,
IL,
MA,
SC,
VC, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR, | DM,
IS,
MG,
SE,
YU,
SD,
ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | D 200
BB,
EC,
KE,
MN,
SK,
ZM,
SZ,
FR,
CF,
S 200
S 200
S 200
S 200
S 200 | 3-US
BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
22-36
22-36
22-40
12-40 | 34907
BR,
ES,
KP,
MX,
TJ,
AM,
UG,
63124
6782
6784
8378 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM, | 2003
BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
20020
20020
20020
20020 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905 | GE,
LK,
OM,
TT,
KZ,
BE,
LU, | GH,
LR,
PH,
TZ,
MD, |
| PI | PATE
WO 2 | RW: | OTOPE
AE,
CO,
GM,
LS,
PL,
UA,
RU,
GH,
NL,
ML, | AG,
CR,
HR,
LT,
PT,
UG,
TJ,
GM,
CY, | AL,
CU,
HU,
LU,
RO,
US,
TM
KE,
CZ,
SE, | AM,
CZ,
ID,
LV,
RU,
UZ,
DE,
SI,
SN, | 20030
AT,
DE,
IL,
MA,
SC,
VC,
MW,
DK,
SK, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR,
TG | DM,
IS,
MG,
SE,
YU,
SD,
ES, | BA, DZ, JP, MK, SG, ZA, SL, FI, BJ, US | D 200
BB,
EC,
KE,
MN,
SK,
ZM,
SZ,
FR,
CF,
3 200
3 200
3 200
5 200
5 200
5 200 | 3-US
BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
2-35
2-36
2-40
2-40
12-40
13-44 | 34907
BR,
ES,
KP,
MX,
TJ,
AM,
UG,
63124
6782
6784
8378
9293
0129
819 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
PP | 2003
BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002(202(202(202(2002(2002(2002(2002(2 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0905
0115 | GE,
LK,
OM,
TT,
KZ,
BE,
LU, | GH,
LR,
PH,
TZ,
MD, |
| PI | PATE WO 2 | RW: 8518 2965 | OO. OTOPE AE, CO, GM, LS, PL, UA, RU, GH, NL, ML, | AG,
CR,
HR,
LT,
PT,
UG,
TJ,
GM,
CY, | AL,
CU,
HU,
RO,
US,
TM
KE,
CZ,
SE,
NE, | AM,
CZ,
ID,
LV,
RU,
UZ,
DE,
SI,
SN, | 20030
AT,
DE,
IL,
MA,
SC,
VC,
MW,
DK,
SK,
TD, | AU, DK, IN, MD, SD, VN, MZ, EE, TR, TG | DM,
IS,
MG,
SE,
YU,
SD,
ES, | WG BA, DZ, JP, MK, SG, ZA, SL, FI, BJ, US US US US AU | D 200
BB,
EC,
KE,
MN,
SK,
ZM,
SZ,
FR,
CF,
S 200
S 200
S 200
S 200
S 200
S 200
S 200 | 3-US
BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
2-35
2-36
2-40
2-40
12-40
13-44
18-51 | 34907
BR,
ES,
KP,
MX,
TJ,
AM,
UG,
6782
6784
8378
9293
0129
819
3891
188 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
PP
PP
PP | 2003
BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002
2002
2002
20 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0115
0112 | GE,
LK,
OM,
TT,
KZ,
BE,
LU, | GH,
LR,
PH,
TZ,
MD, |

| ΡI | WO 2003 | 070969 | A2 | 2003 | 0828 | | W | 0 20 | 03-U | 5490 | 8 | 2003 | 0218 | | |
|-----|--|--|---|---|---|--|---|---|--|---|--|---|---|--|---|
| | ₩: | | | AM, AT, | | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | | CZ, DE, | | | | | | | | | | | |
| | | | | ID, IL, | | | | | | | | | | | LR, |
| | | | | LV, MA, | | | | | | | | | | | PH, |
| | | | | RU, SC, | | | | | | | | | | | |
| | | - | | JZ, VC, | VN, | ΥU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG, | KΖ, | MD, |
| | DW. | RU, TJ | | LS, MW, | M7 | aп | ST. | 97 | m 7 | IIG | 7.M | 77.TA7 | λ·π | BF | BG |
| | RW: | CH CY | , KE, 1 | DE, DK, | EE. | ES. | FT. | FR. | GB. | GR. | HII. | TE. | ΤΨ. | רווין
לממ | MC. |
| | | | | SI, SK, | | | | | | | | | | | |
| | | | | SN, TD, | | , | • | | • | • | • | | | ~, | • |
| | | • | | | | | U | S 20 | 02-3 | 5858 | 0PP | 2002 | 0220 | | |
| | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | | 2002
2002 | | | |
| | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | | 2003 | | | |
| | AU 9851 | 819 | A1 | 1998 | 0611 | | | U 19 | | | | 1998 | | | |
| | AU 7296 | 57 | В2 | 2001 | 0208 | | | | | | | | | | |
| | 0000 | 400 | - 1 | 1000 | 0016 | | | | | | 1 A | 1996 | | | |
| | AU 9939 | 188 | A1 | 1999 | 0916 | | | U 19
U 19 | | | 73 | 1999
1995 | | | |
| FAN | 2003:67 | 9010 | | | | | n. | 0 13 | <i>J</i> | 0422 | AS | 1,000 | 0010 | | |
| | PATENT | NO. | KINI | DATE | | | | PPLI | | | | DATE | | | |
| ΡI | | | | | | | | |
03_บ | | | | | | |
| | - WO 2003 | በፖበዓፖበ | 72.2 | 2003 | | | 1/// | | | | | ZUU.5 | | | |
| 11 | | 070970
AE. AG | A2
. AL. <i>A</i> | 2003
AM. AT. | | AZ. | | | | | | 2003
BZ, | | CH, | CN, |
| 11 | WO 2003
W: | AE, AG | , AL, A | AM, AT, | AU, | | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | | |
| 11 | | AE, AG
CO, CR
GM, HR | , AL, A
, CU, C
, HU, 1 | AM, AT,
CZ, DE,
ID, IL, | AU,
DK,
IN, | DM,
IS, | BA,
DZ,
JP, | BB,
EC,
KE, | BG,
EE,
KG, | BR,
ES,
KP, | BY,
FI,
KR, | BZ,
GB,
KZ, | CA,
GD,
LC, | GE,
LK, | GH,
LR, |
| 11 | | AE, AG
CO, CR
GM, HR
LS, LT | , AL, A
, CU, C
, HU, I
, LU, I | AM, AT,
CZ, DE,
ID, IL,
LV, MA, | AU,
DK,
IN,
MD, | DM,
IS,
MG, | BA,
DZ,
JP,
MK, | BB,
EC,
KE,
MN, | BG,
EE,
KG,
MW, | BR,
ES,
KP,
MX, | BY,
FI,
KR,
MZ, | BZ,
GB,
KZ,
NO, | CA,
GD,
LC,
NZ, | GE,
LK,
OM, | GH,
LR,
PH, |
| 11 | | AE, AG CO, CR GM, HR LS, LT PL, PT | , AL, A, CU, C, HU, I, LU, I, RO, H | AM, AT,
CZ, DE,
ID, IL,
LV, MA,
RU, SC, | AU,
DK,
IN,
MD,
SD, | DM,
IS,
MG,
SE, | BA,
DZ,
JP,
MK,
SG, | BB,
EC,
KE,
MN,
SK, | BG,
EE,
KG,
MW,
SL, | BR,
ES,
KP,
MX,
TJ, | BY,
FI,
KR,
MZ,
TM, | BZ,
GB,
KZ,
NO,
TN, | CA,
GD,
LC,
NZ,
TR, | GE,
LK,
OM,
TT, | GH,
LR,
PH,
TZ, |
| 11 | | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG | , AL, A
, CU, C
, HU, I
, LU, I
, RO, H
, US, U | AM, AT,
CZ, DE,
ID, IL,
LV, MA, | AU,
DK,
IN,
MD,
SD, | DM,
IS,
MG,
SE, | BA,
DZ,
JP,
MK,
SG, | BB,
EC,
KE,
MN,
SK, | BG,
EE,
KG,
MW,
SL, | BR,
ES,
KP,
MX,
TJ, | BY,
FI,
KR,
MZ,
TM, | BZ,
GB,
KZ,
NO,
TN, | CA,
GD,
LC,
NZ,
TR, | GE,
LK,
OM,
TT, | GH,
LR,
PH,
TZ, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ | , AL, A
, CU, C
, HU, I
, LU, I
, RO, H
, US, U | AM, AT, CZ, DE, ID, IL, LV, MA, RU, SC, JZ, VC, | AU,
DK,
IN,
MD,
SD,
VN, | DM,
IS,
MG,
SE,
YU, | BA,
DZ,
JP,
MK,
SG,
ZA, | BB,
EC,
KE,
MN,
SK,
ZM, | BG,
EE,
KG,
MW,
SL,
ZW, | BR,
ES,
KP,
MX,
TJ,
AM, | BY,
FI,
KR,
MZ,
TM,
AZ, | BZ,
GB,
KZ,
NO,
TN,
BY, | CA,
GD,
LC,
NZ,
TR,
KG, | GE,
LK,
OM,
TT,
KZ, | GH,
LR,
PH,
TZ,
MD, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM | , AL, A
, CU, C
, HU, I
, LU, I
, RO, I
, US, U
, TM | AM, AT, CZ, DE, ID, IL, LV, MA, RU, SC, JZ, VC, LS, MW, | AU,
DK,
IN,
MD,
SD,
VN, | DM,
IS,
MG,
SE,
YU, | BA,
DZ,
JP,
MK,
SG,
ZA, | BB,
EC,
KE,
MN,
SK,
ZM, | BG,
EE,
KG,
MW,
SL,
ZW, | BR,
ES,
KP,
MX,
TJ,
AM, | BY,
FI,
KR,
MZ,
TM,
AZ, | BZ,
GB,
KZ,
NO,
TN,
BY, | CA,
GD,
LC,
NZ,
TR,
KG, | GE,
LK,
OM,
TT,
KZ, | GH,
LR,
PH,
TZ,
MD, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY | , AL, A
, CU, C
, HU, I
, RO, H
, US, U
, TM
, KE, I
, CZ, H | AM, AT, CZ, DE, ID, IL, LV, MA, RU, SC, JZ, VC, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE, | DM, IS, MG, SE, YU, SD, ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI, | BB,
EC,
KE,
MN,
SK,
ZM, | BG,
EE,
KG,
MW,
SL,
ZW, | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR, | BY,
FI,
KR,
MZ,
TM,
AZ, | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE, | CA,
GD,
LC,
NZ,
TR,
KG, | GE,
LK,
OM,
TT,
KZ,
BE,
LU, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT | , AL, A
, CU, C
, HU, I
, RO, H
, US, U
, TM
, KE, I
, CZ, I
, SE, S | AM, AT, CZ, DE, ID, IL, LV, MA, RU, SC, JZ, VC, LS, MW, DE, DK, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR, | DM, IS, MG, SE, YU, SD, ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB,
EC,
KE,
MN,
SK,
ZM,
SZ,
FR,
CF, | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG, | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI, | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM, | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA, | CA,
GD,
LC,
NZ,
TR,
KG, | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT | , AL, A
, CU, C
, HU, I
, RO, H
, US, U
, TM
, KE, I
, CZ, I
, SE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, VC, LS, MW, DE, DK, SK, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR, | DM, IS, MG, SE, YU, SD, ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB,
EC,
KE,
MN,
SK,
ZM,
SZ,
FR,
CF, | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG, | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI, | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM, | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA, | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN, | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT | , AL, A
, CU, C
, HU, I
, RO, H
, US, U
, TM
, KE, I
, CZ, I
, SE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, VC, LS, MW, DE, DK, SK, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR, | DM, IS, MG, SE, YU, SD, ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB,
EC,
KE,
MN,
SK,
ZM,
SZ,
FR,
CF,
S 20
S 20 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG, | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM, | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT | , AL, A
, CU, C
, HU, I
, RO, H
, US, U
, TM
, KE, I
, CZ, I
, SE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, VC, LS, MW, DE, DK, SK, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR, | DM, IS, MG, SE, YU, SD, ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 20 S 20 S 20 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-3 | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678 | BY, FI, KR, MZ, TM, AZ, LM, HU, CM, OPP 4PP 2PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT | , AL, A
, CU, C
, HU, I
, RO, H
, US, U
, TM
, KE, I
, CZ, I
, SE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, VC, LS, MW, DE, DK, SK, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR, | DM, IS, MG, SE, YU, SD, ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 20 S 20 S 20 S 20 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-3 | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678 | BY, FI, KR, MZ, TM, AZ, CM, HU, CM, OPP 4PP 2PP 4PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT | , AL, A
, CU, C
, HU, I
, RO, H
, US, U
, TM
, KE, I
, CZ, I
, SE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, VC, LS, MW, DE, DK, SK, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR, | DM, IS, MG, SE, YU, SD, ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 20 S 20 S 20 S 20 S 20 S 20 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-3
02-3
02-4
02-4 | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678
0678
06837 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
OPP
4PP
2PP
4PP
8PP
3PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0909 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT | , AL, A
, CU, C
, HU, I
, RO, H
, US, U
, TM
, KE, I
, CZ, I
, SE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, VC, LS, MW, DE, DK, SK, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR, | DM, IS, MG, SE, YU, SD, ES, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 20 S 2 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-3
02-4
02-4
03-4 | BR,
ES,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678
0678
06929
4012 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
OPP
4PP
4PP
4PP
8PP
3PP
9PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002
2002
2002 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0909
0115 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W:
RW:
AU 9851 | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG GH, GM CH, CY NL, PT ML, MR | , AL, A
, CU, C
, HU, I
, RO, I
, US, U
, TM
, KE, I
, CZ, I
, SE, S
, NE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, JZ, VC, LS, MW, DE, DK, SI, SK, TD, | AU, DK, IN, MD, SD, VN, MZ, EE, TR, TG | DM,
IS,
MG,
SE,
YU,
SD,
ES,
BF, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 20 S 20 S 20 S 20 S 20 S 20 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-3
02-4
02-4
03-4 | BR,
ES,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678
0678
06929
4012 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
OPP
4PP
4PP
4PP
8PP
3PP
9PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0909
0115 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W:
RW: | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG GH, GM CH, CY NL, PT ML, MR | , AL, A
, CU, C
, HU, I
, RO, I
, US, U
, TM
, KE, I
, CZ, I
, SE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, JZ, VC, LS, MW, DE, DK, SI, SK, TD, | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR,
TG | DM,
IS,
MG,
SE,
YU,
SD,
ES,
BF, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ, | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 200 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-3
02-4
02-4
03-4
98-5 | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678
0929
4012
1819 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
0PP
4PP
4PP
8PP
3PP
9PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002
2002
2003
1998 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0909
0115
0112 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W:
RW:
AU 9851
AU 7296 | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT ML, MR | AL, A
, CU, C
, HU, I
, RO, I
, US, U
, TM
, KE, I
, CZ, I
, SE, S
, NE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, JZ, VC, LS, MW, DE, DK, SI, SK, TD, 1998 2001 | AU, DK, IN, MD, SD, VN, MZ, EE, TR, TG | DM,
IS,
MG,
SE,
YU,
SD,
ES,
BF, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ,
UU
UU
UU
UU
UU
UU
UU
UU
UU
UU
UU
UU
UU | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 200 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-4
02-4
02-4
03-4
98-5
96-6 | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678
0929
4012
1819 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
0PP
4PP
4PP
8PP
3PP
9PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002
2002
2003
1998 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0909
0115
0112 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W:
RW:
AU 9851 | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, GM CH, CY NL, PT ML, MR | , AL, A
, CU, C
, HU, I
, RO, I
, US, U
, TM
, KE, I
, CZ, I
, SE, S
, NE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, JZ, VC, LS, MW, DE, DK, SI, SK, TD, 1998 2001 | AU, DK, IN, MD, SD, VN, MZ, EE, TR, TG | DM,
IS,
MG,
SE,
YU,
SD,
ES,
BF, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ,
UUUUUUU
UUUUU
A | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 200 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-4
02-4
02-4
03-4
98-5
96-6
99-3 | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678
0929
4012
1819
2389
9188 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
0PP
4PP
8PP
3PP
9PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002
2002
2003
1998 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0909
0115
0112 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| FAN | W:
RW:
AU 9851
AU 7296 | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG GH, GM CH, CY NL, PT ML, MR | AL, A
, CU, C
, HU, I
, RO, I
, US, U
, TM
, KE, I
, CZ, I
, SE, S
, NE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, JZ, VC, LS, MW, DE, DK, SI, SK, TD, 1998 2001 | AU, DK, IN, MD, SD, VN, MZ, EE, TR, TG | DM,
IS,
MG,
SE,
YU,
SD,
ES,
BF, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ,
UUUUUUU
UUUUU
A | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 200 | BG,
EE,
KG,
MW,
SL,
ZW,
TZ,
GB,
CG,
02-3
02-4
02-4
02-4
03-4
98-5
96-6
99-3 | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678
0929
4012
1819
2389
9188 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
0PP
4PP
8PP
3PP
9PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002
2002
2003
1998 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0909
0115
0112 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: RW: AU 9851 AU 7296 AU 9939 | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG GH, GM CH, CY NL, PT ML, MR | AL, A
, CU, C
, HU, I
, RO, I
, US, U
, TM
, KE, I
, CZ, I
, SE, S
, NE, S | AM, AT, CZ, DE, ID, IL, LV, MA, SC, JZ, VC, LS, MW, DE, DK, SI, SK, SN, TD, 1998 2001 | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR,
TG | DM,
IS,
MG,
SE,
YU,
SD,
ES,
BF, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ,
UUUUUUAA | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 200 | BG,
EE,
KG,
SL,
SL,
TZ,
GB,
CG,
02-3
02-4
02-4
03-4
98-5
96-6
995-2 | BR,
ES,
KP,
MX,
TJ,
OG,
GR,
CI,
5858
6312
8678
0678
0929
4012
1819
2389
9188
6422 | BY,
FI,
KR,
MZ,
TM,
AZ,
ZM,
HU,
CM,
OPP
4PPP
8PPP
8PPP
9PP | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002
2002
2003
1998 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0115
0112
0325
0713
0518 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |
| | W: RW: AU 9851 AU 7296 AU 9939 2003:67 | AE, AG CO, CR GM, HR LS, LT PL, PT UA, UG RU, TJ GH, CY NL, PT ML, MR | AL, A, CU, CU, CU, CU, CU, CU, CU, CU, CU, CU | AM, AT, CZ, DE, ID, IL, IL, MA, SC, ID, IL, VC, MA, SC, JZ, VC, LS, MW, DE, DK, SI, SK, SN, TD, 1998 2001 1999 D DATE | AU,
DK,
IN,
MD,
SD,
VN,
MZ,
EE,
TR,
TG | DM,
IS,
MG,
SE,
YU,
SD,
ES,
BF, | BA,
DZ,
JP,
MK,
SG,
ZA,
SL,
FI,
BJ,
UUUUUUA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA | BB, EC, KE, MN, SK, ZM, SZ, FR, CF, S 200 S 200 S 200 S 200 U 19 S 19 U 19 U 19 | BG,
EE,
KG,
SL,
SL,
TZ,
GB,
CG,
02-3
02-4
02-4
03-4
98-5
96-6
99-3
95-2
CATI | BR,
ES,
KP,
MX,
TJ,
AM,
UG,
GR,
CI,
5858
6312
8678
0678
0929
4012
1819
2389
9188
6422
ON N | BY, FI, KR, MZ, TM, AZ, TM, HU, CM, OPP 4PP 4PP 8PP 9PP 1 A A3 | BZ,
GB,
KZ,
NO,
TN,
BY,
ZW,
IE,
GA,
2002
2002
2002
2002
2002
2002
2003
1998
1996
1995 | CA,
GD,
LC,
NZ,
TR,
KG,
AT,
IT,
GN,
0220
0311
0606
0829
0905
0115
0112
0325
0713
0518 | GE,
LK,
OM,
TT,
KZ,
BE,
LU,
GQ, | GH,
LR,
PH,
TZ,
MD,
BG,
MC, |

<12/10/2003> Patel

```
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                             US 2002-358580PP 20020220
                                             US 2002-363124PP 20020311
                                             US 2002-386782PP 20020606
                                             US 2002-404039PP 20020815
                                             US 2002-406784PP 20020829
                                             US 2002-408378PP 20020905
                                             US 2002-409293PP 20020909
                                             US 2003-439922PP 20030114
                                             US 2003-440129PP 20030115
                                             AU 1998-51819
     AU 9851819
                        A1
                             19980611
                                                              19980112
                        B2
                             20010208
     AU 729657
                                             US 1996-623891 A 19960325
                                             AU 1999-39188 19990713
     AU 9939188
                      A1
                             19990916
                                             AU 1995-26422 A319950518
    2003:679021
FAN
                      KIND DATE
                                            APPLICATION NO. DATE
     PATENT NO.
                     ____
                                             ______
                                       WO 2003-US4034 20030211
     WO 2003070983
                     A1
                             20030828
PI
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                             US 2002-358580PP 20020220
                                             US 2002-363124PP 20020311
                                             US 2002-386782PP 20020606
                                             US 2002-406784PP 20020829
                                              US 2002-408378PP 20020905
                                              US 2002-409293PP 20020909
                                              US 2002-411707PP 20020918
                                             US 2003-440129PP 20030115
                                             AU 1998-51819
     AU 9851819
                        A1
                             19980611
                                                               19980112
                        B2
                             20010208
     AU 729657
                                             US 1996-623891 A 19960325
                             19990916
                                              AU 1999-39188 19990713
     AU 9939188
                        A1
                                             AU 1995-26422 A319950518
     2003:696906
FAN
                                             APPLICATION NO. DATE
     PATENT NO.
                       KIND DATE
                             _____
                             20030904
                                             WO 2003-US2510 20030128
     WO 2003072590 A1
ΡI
```

```
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                           US 2002-358580PP 20020220
                                           US 2002-363124PP 20020311
                                           US 2002-386782PP 20020606
                                           US 2002-406784PP 20020829
                                           US 2002-408378PP 20020905
                                           US 2002-409293PP 20020909
                                           US 2003-440129PP 20030115
     AU 9851819
                       A1
                            19980611
                                           AU 1998-51819
                                                           19980112
     AU 729657
                       B2
                            20010208
                                          US 1996-623891 A 19960325
     AU 9939188
                      A1
                            19990916
                                          AU 1999-39188 19990713
                                          AU 1995-26422 A319950518
FAN
    2003:696993
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     _____
                     ____
                           _____
                                          WO 2003072704
PI
                     A2
                           20030904
                                          WO 2003-US3473 20030205
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
             ML, MR, NE, SN, TD, TG
                                          US 2002-358580PP 20020220
                                          US 2002-363124PP 20020311
                                          US 2002-386782PP 20020606
                                          US 2002-406784PP 20020829
                                          US 2002-408378PP 20020905
                                          US 2002-409293PP 20020909
                                          US 2003-440129PP 20030115
    AU 9851819
                           19980611
                      A1
                                          AU 1998-51819
                                                           19980112
    AU 729657
                      B2
                           20010208
                                          US 1996-623891 A 19960325
    AU 9939188
                      A1
                           19990916
                                          AU 1999-39188
                                                           19990713
                                          AU 1995-26422 A319950518
FAN
    2003:696994
    PATENT NO.
                     KIND
                           DATE
                                          APPLICATION NO. DATE
                     ____
                           _____
PΙ
    WO 2003072705
                    A2
                           20030904
                                          WO 2003-US3662
                                                           20030206
    WO 2003072705
                     A3
                           20031106
           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
```

```
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
              NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
              ML, MR, NE, SN, TD, TG
                                                US 2002-358580PP 20020220
                                                US 2002-363124PP 20020311
                                                US 2002-386782PP 20020606
                                                US 2002-406784PP 20020829
                                                US 2002-408378PP 20020905
                                                US 2002-409293PP 20020909
                                                US 2002-411275PP 20020917
                                                US 2003-440129PP 20030115
     AU 9851819
                                                AU 1998-51819
                                                                  19980112
                       A1
                             19980611
                         B2
                               20010208
     AU 729657
                                                US 1996-623891 A 19960325
                               19990916
                                                AU 1999-39188 19990713
     AU 9939188
                        A1
                                                AU 1995-26422 A319950518
    2003:707840
FAN
                                               APPLICATION NO. DATE
     PATENT NO.
                        KIND DATE
                                                ______
                                                US 1999-476387
                                                                   19991230
     US 6617438
                         В1
                               20030909
PΙ
                                                US 1997-64866P P 19971105
                                                US 1998-83727P P 19980429
                                                US 1998-186675 A219981104
                                                US 1999-301511 A219990428
                                                US 1999-474432 A219991229
                                                AU 1998-51819
                                                                   19980112
     AU 9851819
                       A1
                               19980611
     AU 729657
                         В2
                               20010208
                                                US 1996-623891 A 19960325
                        A1 20030625
                                                EP 2003-2270 19980505
     EP 1321521
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI, CY
                                                US 1997-46059P P 19970509
                                                US 1997-49002P P 19970609
                                                US 1997-51718P P 19970703
                                                US 1997-56808P P 19970822
                                                US 1997-61321P P 19971002
                                                US 1997-61324P P 19971002
                                                US 1997-64866P P 19971105
                                                US 1997-68212P P 19971219
                                                EP 1998-920299 A319981112
                                                US 1998-186675 19981104
     US 6127535
                         Α
                               20001003
                                                US 1997-64866P P 19971105
     US 6482932
                         В1
                               20021119
                                                US 1999-301511
                                                                   19990428
                                                US 1997-64866P P 19971105
                                                US 1998-83727P P 19980429
                                                US 1998-186675 A219981104
                               19990916
                                                AU 1999-39188
                                                                 19990713
     AU 9939188
                         A1
                                                AU 1995-26422 A319950518
     US 6528640
                       В1
                               20030304
                                                US 1999-474432 19991229
                                                US 1997-64866P P 19971105
                                                US 1998-83727P P 19980429
```

```
US 1998-186675 A219981104
                                           US 1999-301511 A219990428
 US 6509460
                     В1
                          20030121
                                           US 2000-644966
                                                              20000823
                                           US 1997-64866P P 19971105
                                           US 1998-186675 A119981104
 WO 2001016312
                                           WO 2000-US23998 20000830
                    A2
                          20010308
 WO 2001016312
                    A3
                          20010809
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
         CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ
     RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
         CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           US 1999-151713PP 19990831
                                           US 1999-156236PP 19990927
                                           US 1999-156467PP 19990927
                                           US 1999-406643 A 19990927
                                           US 1999-436430 A 19991108
                                           US 1999-169100PP 19991206
                                           US 1999-173612PP 19991229
                                           US 1999-474432 A 19991229
                                           US 1999-476387 A 19991230
                                           US 2000-498824 A 20000204
                                           US 2000-531025 A 20000320
                                           US 2000-197769PP 20000414
                                           US 2000-578223 A 20000523
                                           US 2000-636385 A 20000809
EP 1212416
                   A2
                          20020612
                                          EP 2000-963298 20000830
     R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
         IE, SI, LT, LV, FI, RO, MK, CY, AL
                                          US 1999-151713PP 19990831
                                          US 1999-156236PP 19990927
                                          US 1999-156467PP 19990927
                                          US 1999-406643 A 19990927
                                          US 1999-436430 A 19991108
                                          US 1999-169100PP 19991206
                                          US 1999-173612PP 19991229
                                          US 1999-474432 A 19991229
                                          US 1999-476387 A 19991230
                                          US 2000-498824 A 20000204
                                          US 2000-531025 A 20000320
                                          US 2000-197769PP 20000414
                                          US 2000-578223 A 20000523
                                          US 2000-636385 A 20000809
                                          WO 2000-US23998W 20000830
US 2003004122
                A1
                         20030102
                                          US 2001-825805 20010404
                                          US 1997-64866P P 19971105
                                          US 1998-83727P P 19980429
                                          US 1998-186675 A219981104
                                          US 1999-301511 A219990428
                                          US 1999-474432 A219991229
                                          US 1999-476387 A219991230
                                          US 2000-578223 A220000523
US 2003105308
                   A1
                         20030605
                                          US 2001-918728
                                                             20010731
                                          US 1997-64866P P 19971105
                                          US 1998-83727P P 19980429
```

| FAN | 2003:717666
PATENT NO. | KIND DATE | US 1998-186675 A219981104 US 1999-301511 A219990428 US 1999-474432 A219991229 US 1999-476387 A219991230 US 2000-578223 A220000523 US 2001-825805 A220010404 APPLICATION NO. DATE |
|--------------|--|---|---|
| PI | US 2003170891 | A1 20030911 | US 2002-251117 20020919
US 2001-296249PP 20010606
US 2001-916466 A220010725
US 2002-358580PP 20020220
US 2002-163552 A220020606
US 2002-393924PP 20020703 |
| | AU 9851819
AU 729657 | A1 19980611
B2 20010208 | AU 1998-51819 19980112 |
| | AU 9939188 | A1 19990916 | US 1996-623891 A 19960325
AU 1999-39188 19990713
AU 1995-26422 A319950518 |
| | us 2003064945 | A1 20030403 | US 2001-916466 20010725
US 1997-36476P P 19970131
US 1997-985162 A119971204
US 1999-401063 A219990922
US 2001-848754 A220010503 |
| | US 2003105051 | A1 20030605 | US 2001-046754 AZ20010505
US 2002-163552 20020606
US 2001-296249PP 20010606 |
| | W: AE, AG,
CO, CR,
GM, HR,
LS, LT,
PL, PT, | CU, CZ, DE, DK,
HU, ID, IL, IN,
LU, LV, MA, MD,
RO, RU, SC, SD,
US, UZ, VC, VN, | WO 2003-US5045 20030220 AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, |
| | CH, CY,
NL, PT, | CZ, DE, DK, EE, SE, SI, SK, TR, | SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, |
| FAN | ML, MR, | NE, SN, TD, TG | US 2001-296249PP 20010606 US 2001-916466 A 20010725 US 2002-358580PP 20020220 US 2002-363124PP 20020311 WO 2002-US16840A120020529 US 2002-163552 A120020606 US 2002-386782PP 20020606 US 2002-393924PP 20020703 US 2002-406784PP 20020829 US 2002-408378PP 20020905 US 2002-409293PP 20020909 US 2002-251117 A120020919 US 2002-277494 A120021021 US 2003-440129PP 20030115 |
| D .** | PATENT NO. | KIND DATE | APPLICATION NO. DATE |
| ΡĪ | US 2003171311 | A1 20030911 | US 2001-817879 20010326 |

```
US 1998-83217P P 19980427
                                          US 1998-100842PP 19980918
                                          US 1999-257608 B219990225
                                          US 1999-274553 A219990323
                                          US 2000-504231 A220000215
                                          US 2000-611931 A220000707
                                          US 2000-740332 A220001218
AU 9851819
                    A1
                          19980611
                                          AU 1998-51819
                                                              19980112
AU 729657
                    В2
                          20010208
                                          US 1996-623891 A 19960325
US 2002082225
                    Α1
                          20020627
                                          US 1999-274553
                                                              19990323
                                          AU 1999-39188
AU 9939188
                    A1.
                          19990916
                                                              19990713
                                          AU 1995-26422 A319950518
US 2002013458
                    A1
                          20020131
                                          US 2000-504231
                                                              20000215
                                          US 1999-274553 A219990323
US 2003125270
                   A1
                          20030703
                                          US 2000-740332
                                                              20001218
                   Α1
                          20021017
                                          WO 2002-US9187
                                                              20020326
WO 2002081494
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
         CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
         GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
         PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
        UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
        TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
        CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
         BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                          US 2001-817879 A 20010326
                                          US 2001-296876PP 20010608
                                          US 2001-877478 A 20010608
                                          US 2001-335059PP 20011024
                                          US 2001-337055PP 20011205
                         20021017
                                          WO 2002-XA9187
WO 2002081494
                    A1
                                                              20020326
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
         CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
         GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
         PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
         UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
         CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
         BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
                                          US 2001-817879 A 20010326
                                          US 2001-296876PP 20010608
                                          US 2001-877478 A 20010608
                                          US 2001-335059PP 20011024
                                          US 2001-337055PP 20011205
WO 2002081494
                    A1
                         20021017
                                          WO 2002-XB9187
                                                              20020326
        AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
        PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
         CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
         BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
```

US 2001-817879 A 20010326

```
US 2001-296876PP 20010608
                                                 US 2001-877478 A 20010608
                                                 US 2001-335059PP 20011024
                                                 US 2001-337055PP 20011205
      WO 2002081494
                          A1
                                20021017
                                                 WO 2002-XC9187 20020326
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
               BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
                                                 US 2001-817879 A 20010326
                                                 US 2001-296876PP 20010608
                                                 US 2001-877478 A 20010608
                                                 US 2001-335059PP 20011024
                                                 US 2001-337055PP 20011205
      WO 2002081494
                        A1
                                20021017
                                                 WO 2002-XD9187
                                                                  20020326
              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
               GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL,
               PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
               UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
               CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
               BF, BJ, CF, CG, CI, CM, GA, GN, GQ, ML, MR, NE, SN, TD, TG
                                                US 2001-817879 A 20010326
                                                US 2001-296876PP 20010608
                                                US 2001-877478 A 20010608
                                                US 2001-335059PP 20011024
                                                US 2001-337055PP 20011205
FAN
     2003:731500
      PATENT NO.
                        KIND
                              DATE
                                                APPLICATION NO. DATE
                        ____
                               _____
PΙ
     US 2003171311
                         A1
                               20030911
                                                US 2001-817879 20010326
                                                US 1998-83217P P 19980427
                                                US 1998-100842PP 19980918
                                                US 1999-257608 B219990225
                                                US 1999-274553 A219990323
                                                US 2000-504231 A220000215
                                                US 2000-611931 A220000707
                                                US 2000-740332 A220001218
     AU 9851819
                         A1
                               19980611
                                                AU 1998-51819
                                                                   19980112
     AU 729657
                         В2
                               20010208
                                                US 1996-623891 A 19960325
     US 2002082225
                         A1
                               20020627
                                                US 1999-274553
                                                                   19990323
     AU 9939188
                         A1
                               19990916
                                                AU 1999-39188
                                                                   19990713
                                                AU 1995-26422 A319950518
     US 2002013458
                         A1
                               20020131
                                                US 2000-504231
                                                                   20000215
                                                US 1999-274553 A219990323
     US 2003125270
                               20030703
                                                US 2000-740332
                                                                   20001218
FAN
    2003:737286
     PATENT NO.
                        KIND
                              DATE
                                                APPLICATION NO. DATE
```

| | | | | | | | | | | _ | ~ | | | | | | | |
|----------|-----|---------------|-------|-----|--------|--------|--------------|------|-----|--------|------|--------------|--------------|-------------|------------------------------|--------------|-----|-----|
| PI | US | 2003 | 1759 | 50 | A | 1 | 2003 | 0918 | | U
U | S 20 | 01-2
02-1 | 9414
5758 | 0PP
0 A2 | 2002
2001
2002
2002 | 0529
0529 | | |
| | | 9851
7296 | | | A
B | | 1998
2001 | | | | U 19 | | | | 1998 | | | |
| | AU | 9939 | 188 | | A | 1 | 1999 | 0916 | | A | Մ 19 | 99-3 | 9188 | | 1996
1999
1995 | 0713 | | |
| | US | 2003 | 1245 | 13 | A | 1 | 2003 | 0703 | | U | s 20 | 02-1 | 5758 | 0 | 2002
2001 | 0529 | | |
| | WO | | 0701 | | A | | 2003 | | | W | 0 20 | 03-U | S519 | 0 | 2003 | 0220 | | |
| | | ₩: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ,
GB, | CA, | CH, | CN, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | J₽, | ΚE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | ΝZ, | OM, | PH, |
| | | | | | | | | | | | | | | | TN,
BY, | | | |
| | | | RU, | ТJ, | TM | | | | | | | | | | | | | |
| | | RW: | | | | | | | | | | | | | ZW,
IE, | | | |
| | | | | | | | | | | | | | | | GA, | | | |
| | | | | | | | TD, | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 2001
2002 | | | |
| | | | | | | | | | | _ | | | | | 2002 | | | |
| | | | | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | | | | | .2002
2002 | | | |
| | | | | | | | | | | U | s 20 | 02-3 | 9803 | 6PP | 2002 | 0723 | | |
| | | | | | | | | | | | | | | | 2002
2002 | | | |
| | | | | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | | | | | | 2002 | | | |
| T? 70 NT | 200 | 03:87 | 11771 | | | | | | | Ū | S 20 | 03-4 | 4012 | 9PP | 2003 | 0115 | | |
| FAN | | 73:07
PENT | | | KI: | ND
 | DATE | | | A
- | PPLI | CATI | ON N | 0. | DATE | | | |
| PI | US | 2003 | 2068 | 87 | A | 1 | 2003 | 1106 | | | s 20 | | | | 2002 | | | |
| | | | | | | | | | | | | | | | .1992
.1994 | | | |
| | | | | | | | | | | | | | | | 1999 | | | |
| | | | | | | | | | | - | | | | | 2000 | | | |
| | | | | | | | | | | | | | | | 2000 | | | |
| | | | | | | | | | | U | s 20 | 01-2 | 9687 | 6PP | 2001 | 0608 | | |
| | | | | | | | | | | | | - | | | 2001 | | | |
| | | | | | | | | | | | | | | | 2001
2001 | | | |
| | | | | | | | | | | U | s 20 | 02-3 | 5858 | 0PP | 2002 | 0220 | | |
| | | | | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | ** | | | | | 2002 | | | |
| | | | | | | | | | | U | s 20 | 02-4 | 0678 | 4PP | 2002 | 0829 | | |
| | | | | | | | | | | | | | | | 2002 | | | |
| | | | | | | | | | | Ü | S 20 | UZ-4 | 0929 | 322 | 2002 | 0909 | | |

```
US 6017756
                  Α
                       20000125
                                       US 1994-193627
                                                        19940207
                                       US 1992-882712 B119920514
AU 9851819
                  A1
                       19980611
                                       AU 1998-51819
                                                        19980112
AU 729657
                  B2
                       20010208
                                       US 1996-623891 A 19960325
AU 9939188
                  A1
                       19990916
                                       AU 1999-39188
                                                        19990713
                                       AU 1995-26422 A319950518
US 2003068301
                  A1
                       20030410
                                       US 2001-877478
                                                        20010608
                                       US 1992-882712 B119920514
                                       US 1994-193627 Al19940207
                                       US 1999-436430 A219991108
                                       US 2000-531025 A220000320
                                       US 2000-636385 A220000809
                                       US 2000-696347 A220001024
WO 2002081494
                  Α1
                       20021017
                                      WO 2002-US9187
                                                        20020326
       AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
        GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
        PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
        UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
        TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
        CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
        BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                      US 2001-817879 A 20010326
                                      US 2001-296876PP 20010608
                                      US 2001-877478 A 20010608
                                      US 2001-335059PP 20011024
                                      US 2001-337055PP 20011205
US 2003148985
                  A1
                       20030807
                                      US 2002-310294
                                                       20021205
                                      US 2001-337055PP 20011205
```

AB The present invention concerns methods and reagents useful in modulating gene expression in a variety of applications, including use in therapeutic, diagnostic, target validation, and genomic discovery applications. Specifically, the invention relates to small nucleic acid mols., such as short interfering nucleic acid (siNA), short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA), and short hairpin RNA (shRNA) mols. capable of mediating RNA interference (RNAi) against target nucleic acid sequences. Exemplary siNA mols. are synthesized in tandem using std. phosphoramidite synthesis chem. and a cleavable linker, for example a succinyl-based linker, followed by a one-step purifn. process that provides RNAi mols. in high yield. Chem. modifications (2'-O-Me and 2'-deoxy-2'-fluoro groups, phosphorothioate linkages, 5'-terminal caps comprising an inverted deoxy abasic moiety, etc.) in siNA constructs are selected to yield nuclease resistance while preserving the ability to mediate RNAi activity. The siNA mols. are designed that can bind to target mRNAs for vascular endothelial growth factor receptors, BCL2, HER2/neu/ c-Myc, PCNA, RELA, PTP1B, BACE, CHK1, PKC-.alpha., and EGFR/HER1, and are optionally individually analyzed by a computer folding algorithm to assess whether the siNA mol. can interact with the target sequence. The siNA mols. are useful in the treatment and diagnosis of any condition that responds to modulation of gene expression or activity in a cell, tissue, or organism.

L9 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN AN 2003:282394 CAPLUS

FAN.CNT 1

```
DN
     138:304265
TΙ
     Preparation of N-pyrrolopyridinyl carboxamides as Chk1 kinase
     inhibitors for treating various forms of cancer and hyperproliferative
     Stavenger, Robert A.; Witherington, Jason; Rawlings, Derek A.; Holt,
IN
     Dennis A.; Chan, George.
     Smithkline Beecham Corporation, USA; Smithkline Beecham Plc
SO
     PCT Int. Appl., 62 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
```

PATENT NO. KIND DATE APPLICATION NO. DATE ____ -----WO 2002-US31842 20021004 PΙ WO 2003028724 A1 20030410 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

US 2001-326974PP 20011004

OS MARPAT 138:304265 GI

NE, SN, TD, TG

$$R^{1}$$
 N
 N
 N
 N

N-pyrrolopyridinyl carboxamides (shown as I; variables defined below; e.g. AΒ N-(5-phenyl-1H-pyrrolo[2,3-b]pyridin-3-yl) benzamide) useful in the inhibition of damage response kinases (no data) are provided. Although the methods of prepn. are not claimed, 94 example prepns. are included. For I: R1 is aryl or heteroaryl, wherein aryl or heteroaryl may optionally be substituted by .gtoreq.1 of group A and on any position with the exception that R1 is not 3,4-dichlorophenyl; A = C1-10 alkyl, C1-10 alkanoyl, C2-10 alkenyl, C2-10 alkynyl, C3-10 cycloalkyl, C0-6 alkylaryl, C0-6 alkylheterocyclyl, C0-6 alkylheteroaryl, C(:NH)R3, COR3, CONR3R4, CON(O)R3R4, CO2R3, C(O)SR3, C(S)R3, cyano, trifluoromethyl, NR3R4, N(O)R3R4, NR3COR4, NR3CONR4R5, NR3CON(O)R4R5, NR3CO2R3, NR3C(O)SR3, NR3SO2R3, nitro, OR3, OCF3, aryloxy, heteroaryloxy, SR3, S(O)R3, S(O)2R3, SCF3, S(0)CF3, S(0)2CF3, SO2NR3R4, SO3R3, PO3R3R4, and halo, wherein C1-10 alkyl, C1-10 alkanoyl, C2-10 alkenyl, C2-10 alkynyl, C3-10 cycloalkyl, CO-5 alkylaryl, CO-5 alkylheterocyclyl, CO-5 alkylheteroaryl, (CH2)0-5 heteroaryl, aryloxy, and heteroaryloxy may be optionally substituted by .gtoreq. $\bar{1}$ of group B (see claims) and on any position. R2 = C1-8 alkyl, C2-8 alkenyl, C3-6 cycloalkyl, OR9, NR1OR11, Ph, pyridyl, pyridazinyl,

pyrimidinyl, pyrazolinyl, thiazinyl, pyrrolyl, furyl, thienyl, pyrazolyl, imidazolyl, triazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl and thiadiazolyl; addnl. details are in the claims.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:27421 CAPLUS
- DN 139:168
- TI Cyclin-dependent kinase modulators studied at the NCI: Pre-clinical and clinical studies
- AU Sausville, Edward A.
- CS Developmental Therapeutics Program, National Cancer Institute, Rockville, MD, 20852, USA
- SO Current Medicinal Chemistry: Anti-Cancer Agents (2003), 3(1), 47-56 CODEN: CMCACI; ISSN: 1568-0118
- PB Bentham Science Publishers Ltd.
- DT Journal; General Review
- LA English
- AΒ A review. The cyclin dependent kinases (CDKs) are key regulators of cell cycle progression. Lead compds. (from empirical anti-proliferative screening approaches) have been defined which modulate CDK function and have evidence of anti-proliferative activity in tissue culture systems and in some cases anti-tumor activity in vivo in conventional xenograft models. Two of these, flavopiridol and UCN-01, have entered initial clin. testing. Flavopiridol is a "pan-CDK" inhibitor, with essentially equal potency in inhibiting all CDKs tested. The recent elucidation that in addn. to cell cycle regulatory functions, CDK family members have been defined which regulate transcription, neuronal, and secretory function has increased the need for definition of CDK antagonists with greater selectivity. Novel purine, pyrimidine, and benzazepinone derivs. have been characterized in part through the National Cancer Institute's drug screening systems. UCN-01, in contrast to flavopiridol, modulates CDK activity participating in the DNA damage response, possibly through potent inhibition of the chk1 checkpoint kinase, as well as affecting CDK function indirectly through activity on other kinase targets. An unexpected feature in its development has been avid binding to .alpha.1 acid glycoprotein. Further progress in CDK modulator development will require the definition of addnl. lead structures that address issues raised by these early mols. entering into clin. development.

RE.CNT 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

| => log y | |
|--|----------------|
| COST IN U.S. DOLLARS SINCE FILE TO | \mathtt{TAL} |
| ENTRY SESS: | ION |
| FULL ESTIMATED COST 253.54 359 | .10 |
| | |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TO | TAL |
| ENTRY SESS: | ION |
| CA SUBSCRIBER PRICE -46.87 -46 | .87 |

STN INTERNATIONAL LOGOFF AT 16:30:29 ON 10 DEC 2003

STIC/CAPLUS 10087715

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

Welcome to STN International Web Page URLs for STN Seminar Schedule - N. America NEWS 1 NEWS 2 "Ask CAS" for self-help around the clock NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present 4 AUG 05 New pricing for EUROPATFULL and PCTFULL effective NEWS August 1, 2003 NEWS 5 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN NEWS 6 AUG 18 Data available for download as a PDF in RDISCLOSURE Simultaneous left and right truncation added to PASCAL NEWS 7 AUG 18 NEWS 8 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Righ Truncation Simultaneous left and right truncation added to ANABSTR NEWS 9 AUG 18 NEWS 10 SEP 22 DIPPR file reloaded NEWS 11 DEC 08 INPADOC: Legal Status data reloaded NEWS 12 SEP 29 DISSABS now available on STN NEWS 13 OCT 10 PCTFULL: Two new display fields added NEWS 14 OCT 21 BIOSIS file reloaded and enhanced NEWS 15 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced NEWS 16 NOV 24 MSDS-CCOHS file reloaded NEWS 17 DEC 08 CABA reloaded with left truncation NEWS 18 DEC 08 IMS file names changed Experimental property data collected by CAS now available NEWS 19 DEC 09 in REGISTRY STN Entry Date available for display in REGISTRY and CA/CAplus NEWS 20 DEC 09 NOVEMBER 14 CURRENT WINDOWS VERSION IS V6.01c, CURRENT NEWS EXPRESS MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003 STN Operating Hours Plus Help Desk Availability NEWS HOURS NEWS INTER General Internet Information NEWS LOGIN Welcome Banner and News Items NEWS PHONE Direct Dial and Telecommunication Network Access to STN CAS World Wide Web Site (general information) NEWS WWW

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

<12/10/2003>

FILE 'HOME' ENTERED AT 16:13:35 ON 10 DEC 2003

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:13:45 ON 10 DEC 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 DEC 2003 HIGHEST RN 625365-36-8 DICTIONARY FILE UPDATES: 9 DEC 2003 HIGHEST RN 625365-36-8

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

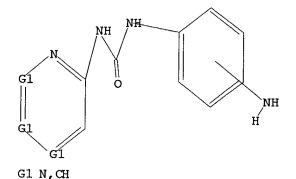
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> Uploading 10087715.2

L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR



G2 H, Cb, Cy, Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss full FULL SEARCH INITIATED 16:14:08 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 12894 TO ITERATE

100.0% PROCESSED 12894 ITERATIONS SEARCH TIME: 00.00.01

3 ANSWERS

L2 3 SEA SSS FUL L1

=> file marpat
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 148.15 148.36

FULL ESTIMATED COST

FILE 'MARPAT' ENTERED AT 16:14:18 ON 10 DEC 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 139 ISS23) (20031205ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6642272 04 NOV 2003 DE 10317295 30 OCT 2003 EP 1361251 12 NOV 2003 JP 2003321470 11 NOV 2003 WO 2003092890 13 NOV 2003

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s 11 sss full FULL SEARCH INITIATED 16:14:26 FILE 'MARPAT' FULL SCREEN SEARCH COMPLETED - 12706 TO ITERATE

74.6% PROCESSED 9484 ITERATIONS

42 ANSWERS

100.0% PROCESSED 12706 ITERATIONS (2 INCOMPLETE) 65 ANSWERS SEARCH TIME: 00.00.34

L3 65 SEA SSS FUL L1

=> file caold

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 104.55 252.91

FILE 'CAOLD' ENTERED AT 16:15:11 ON 10 DEC 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s ll sss full

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 16:15:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 12894 TO ITERATE

100.0% PROCESSED 12894 ITERATIONS SEARCH TIME: 00.00.01

3 ANSWERS

L4 3 SEA SSS FUL L1

L5 0 L4

=> d his

(FILE 'HOME' ENTERED AT 16:13:35 ON 10 DEC 2003)

FILE 'REGISTRY' ENTERED AT 16:13:45 ON 10 DEC 2003
L1 STRUCTURE UPLOADED

L2 3 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 16:14:18 ON 10 DEC 2003 L3 65 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 16:15:11 ON 10 DEC 2003 S L1

FILE 'REGISTRY' ENTERED AT 16:15:17 ON 10 DEC 2003 L4 3 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 16:15:18 ON 10 DEC 2003 L5 0 S L4 SSS FULL

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

Patel

<12/10/2003>

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 16:15:28 ON 10 DEC 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

0.40 401.86

FILE COVERS 1907 - 10 Dec 2003 VOL 139 ISS 24 FILE LAST UPDATED: 9 Dec 2003 (20031209/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 17 fbib hitstr abs total

L7 ANSWER 1 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:837035 CAPLUS

DN 139:337787

TI Preparation of novel methoxybenzamides for use in MCH receptor related disorders

IN Hoegberg, Thomas; Bjurling, Anna Emelie; Receveur, Jean-Marie; Little, Paul Brian; Elling, Christian E.; Norregaard, Pia Karina; Ulven, Trond

PA 7TM Pharma A/S, Den.

SO PCT Int. Appl., 133 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

```
PΙ
     WO 2003087045
                       A1
                            20031023
                                           WO 2003-DK231
                                                             20030408
            AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
             FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
             ZM, ZW, AM, AZ
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
                                           DK 2002-519
                                                          A 20020409
                                           DK 2002-520
                                                          A 20020409
                                           DK 2002-524
                                                          A 20020409
                                           DK 2002-1818
                                                          A 20021125
OS
```

OS MARPAT 139:337787

Title compds. I [wherein A = a linker, e.g. CHR7CONR7, CONR7, OCONR7, AΒ SO2NR7, CHR7NR7CO, NR7COR7, hexahydro-2-oxo-pyrimidine-1,3-diyl, 2-oxoimidazolidine-1,3-diyl, 1,2,4-oxadiazolediyl, 1,3,4-oxadiazolediyl, CH=CH, OCHR7, NR7CHR7, SCHR7, or (un) substituted imidazolediyl or 1,2,4-triazolediyl; Ar = independently (hetero)aryl; R1 = alkoxy; R2 = H, OH, NH2, or alkoxy; COQ = amino-substituted amide; R5 and R6 = independently H, halo, alkoxy, OH, (di)alkylamino, hydroxyalkyl, carboxamido, acyl(amido), CHO, nitrile, alkyl, alkenyl, alkynyl, SMe, (fluoro)alkyl, (fluoro)alkoxy, (fluoro)thioalkoxy, SO2NH2, (di)alkylaminosulfonyl, or alkylsulfonyl; R7 = independently H, alkyl, or alkenyl; R8 = halo, (alkyl)(cyclo)alkyl, alkenyl, alkynyl, (alkyl) (hetero) aryl, (alkyl) heterocyclyl, (aryl) alkoxy, aryloxy, dialkylamino, (di)alkylcarbamoyl, (di)arylcarbamoyl, alkanoyl(amino), aroyl(amino), SMe, (fluoro)alkyl, (fluoro)alkoxy, (fluoro)thioalkoxy, or R6ArB; B = a single bond or connecting moiety; X = H, halo, SMe, CF3, OCF3, SCF3, OMe, alkyl, or alkenyl; and physiol. acceptable salts, complexes, solvates, and prodrugs thereof] were prepd. as melanin-concg.

II

hormone (MCH) receptor modulators. For example, coupling of procainamide with 4-trifluoromethoxyphenyl isocyanate in the presence of TEA in CH2Cl2 gave II (59%). In assays of [1251]-MCH binding and phosphatidylinositol turnover using transiently transfected COS-7 cells or stably transfected CHO cells expressing the human MCH-1 receptor, II exhibited activity with IC50 values of 0.07 .mu.M and 0.29 .mu.M, resp. Administration of II (10 mg/kg i.p.) to male Sprague Dawley rats resulted in a significant redn. of their cumulative food intake over 6 h. Thus, I and their pharmaceutical compns. are useful in the treatment or prevention of obesity, depression, diabetes, bulimia, and other MCH receptor related disorders (no data).

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 3 ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
L7
```

2003:777749 CAPLUS AN

DN139:277029

ΤI Preparation and formulation of menthol substituted antithrombotic PAI-1 inhibitors

Bauer, Shawn; Mohan, Raju; Shaw, Kenneth J.; Wu, Qingyu; Ye, Bin; Buckman, IN Brad O.; Ghannam, Ameen; Griedel, Brian D.; Khim, Seock-Kyu; Zhao, Zuchun

PA Schering Aktiengesellschaft, Germany

PCT Int. Appl., 71 pp. CODEN: PIXXD2

DTPatent

English LΑ

FAN.CNT 1

| | 22 mmil 210 | | | | | | | | | | | | | | | | | | |
|----|-------------|---------------|-----|-----|-----------|-----|-------|------|-----------------|-----|-----|------|------|------|------|------|-----|-----|--|
| | PA | PATENT NO. | | | KIND DATE | | | | APPLICATION NO. | | | | 0. | DATE | | | | | |
| | | | | | | | | | | _ | | | | | | | | | |
| ΡĪ | WO | WO 2003080564 | | | Α | 1 . | 2003: | 1002 | | W | 20 | 03-บ | S750 | 6 | 2003 | 0312 | | | |
| | | W: AE, AG | | | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | ΕE, | ES, | FΙ, | GB, | GD, | GΕ, | GH, | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | ΜX, | ΜZ, | NO, | NZ, | OM, | PH, | |
| | | | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, | |
| | | | UA, | UG, | US, | UΖ, | VC, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | KZ, | MD, | |
| | | | RU, | ТJ, | TM | | | | | | | | | | | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | ΑT, | BE, | BG, | |
| | | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | ΗU, | ΙE, | IT, | LU, | MC, | |
| | | | NL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | |
| | | | GW, | ML, | MR, | NE, | SN, | TD, | ΤG | | | | | | | | | | |

US 2002-365932PP 20020320

MARPAT 139:277029 OS

GI

$$\begin{array}{c|c} Me \\ \hline \\ \hline \\ Pr-i \\ \hline \end{array} \begin{array}{c} H \\ N \\ \hline \\ OH \\ \end{array} \begin{array}{c} CO_2H \\ \\ II \\ \end{array}$$

Menthol-substituted compds. of formula I [R1 = H, alkyl, alkylene, aryl, haloalkyl, menthoxyalkyl, heterocyclo, absent; R2 = H, alkoxy, amino, alkylaminocarbonyl, alkyl, etc.; R3 = Ph, CO2H, alkoxy, etc.; R4 = dibenzodioxepinone, pyridinyl, etc.; A = carbonyl, absent; B = N, O, absent; AB = heterocyclo; D = N, O, absent; X = C, N; Y = alkylene, aryl, carbonyl, absent; DY = heterocyclo; Z = alkylene, sulfonyl, aminocarbonyl, carbonyl, absent; m, n, p = 0-2] are prepd. which are useful as antithrombotic agents by inhibiting plasminogen activator inhibitor-1 (PAI-1). The compds. are useful in the treatment of disease-states characterized by thrombotic activity. Pharmaceutical compns. contg. I are described. Thus, II was prepd. from 4-nitrobenzylamine hydrochloride, menthoxyacetyl chloride and 2-hydroxy-3-carboxybenzaldehyde in 90% yield.

I

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7 ANSWER 3 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2003:656580 CAPLUS

DN 139:197369

TI Preparation of aryl ureas with angiogenesis inhibiting activity

IN Dumas, Jacques; Scott, William J.; Elting, James; Hatoum-Makdad, Holia

PA Bayer Corporation, USA

SO PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

| T 1 77 4 4 4 | | | | | | | | | | | | | | | | | | | |
|--------------|------------|------|-----------|-----|------|-----|------|------|------|------|------|------|------|-----|------|------|-----|-----|----|
| | PATENT NO. | | KIND DATE | | DATE | | | A | PPLI | CATI | ON N | ٥. | DATE | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| PI | WO | 2003 | 0682 | 28 | A | 1 | 2003 | 0821 | | W | 0 20 | 03-U | S410 | 3 | 2003 | 0211 | | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NΖ, | OM, | PH, | |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, | UA, | |
| | | | ŪG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | ΤM |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | ŪG, | ZM, | zw, | ΑT, | BE, | BG, | |
| | | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | ΗU, | IE, | IT, | LU, | MC, | |
| | | | | | | | | | | | | | | | | | | | |

NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

I

US 2003207870 A1 20031106

US 2002-354950PP 20020211 US 2003-361858 20030211 US 2002-354950PP 20020211

OS MARPAT 139:197369

GI

$$\begin{array}{c|c} c1 & & & \\ & & & \\ F_3C & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

The title compds. ANHCONHB [A, B = (un) substituted Ph, naphthyl, 5-6 membered monocyclic heteroaryl, etc.], useful for treating diseases mediated by the VEGF induced signal transduction pathway characterized by abnormal angiogenesis or hyperpermeability processes, were claimed. Prepns. of three title ureas are described. E.g., a 3-step synthesis of the urea I (starting from Me 4-chloro-2-pyridinecarboxylate hydrochloride), was given. The KDR (VEGFR2) assay for testing the title ureas is described.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 4 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:551189 CAPLUS
- DN 139:101121
- TI Preparation of 1,1'-biphenyl derivatives as biaromatic ligand activators of peroxisome proliferator-activated receptors subtype gamma (PPAR gamma receptors)
- IN Bernardon, Jean-Michel; Clary, Laurence; Terranova, Eric
- PA Fr
- SO U.S. Pat. Appl. Publ., 23 pp. CODEN: USXXCO
- DT Patent
- LA English

FAN. CNT 2

| ran. | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------|--|-------------------|----------------------|---------------------------------|--|
| PI | US 2003134885 | A1 | 20030717 | US 2002-351425PP | 20021223
20011221
20020128
20020301 |
| PATE: | FR 2833949
FR 2836683
NT FAMILY INFORMA
2003:492185 | A1
A1
TION: | 20030627
20030905 | FR 2001-16750
FR 2002-2647 | 20011221 20020301 |
| t MN | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| PI | FR 2833949
WO 2003055867 | A1
A1 | 20030627
20030710 | FR 2001-16750
WO 2002-FR4232 | 20011221
20021209 |

```
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
        GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
        LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
        PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
        UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
        RU, TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
        CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
        PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
       MR, NE, SN, TD, TG
                                      FR 2001-16750 A 20011221
US 2003134885
                 Α1
                       20030717
                                      US 2002-326054
                                                       20021223
                                      FR 2001-16750 A 20011221
                                      US 2002-351425PP 20020128
                                      FR 2002-2647
                                                    A 20020301
```

OS MARPAT 139:101121

$$R^{2}$$
 R^{3}
 R^{2}
 R^{3}
 R^{4}
 R^{4

The title compds. [I; R1 = Q, CH2CHR6COR5; R2, R3 = H, C1-6 alkyl, aryl, halo, HO, C1-6 alkoxy, aryloxy, aralkyloxy, a polyether radical, NO2, C1-6 alkyl-(un)substituted NH2 group; X = N-(un)substituted CH2NHCO, NHCONH, NHCOCH2, or NHCH2CO whether read from left to right or vise versa; R4 = each (un)substituted Ph, benzyl, phenethyl, thienyl, furyl, or pyridyl; R5 = HO, C1-9 alkoxy; R6 = C1-6 alkyl, OR14, SR14; wherein R14 = C1-12 alkyl, CF3, aryl, aralkyl] are prepd. Novel pharmaceutical/cosmetic compns. contain at least one biarom. ligand activator of a PPAR.gamma. receptor, such biarom. ligand having the structural formula I and are well suited,

inter alia, for regulating and/or restoring skin lipid metab., for treating a wide variety of dermatol. afflictions, and for preventing and/or treating the signs of aging and/or dry skin. Thus, 1.27 g 5-(3'-methylaminomethylbiphenyl-4-ylmethyl) thiazolidine-2,4-dione was condensed with 1.97 g 6-(2-methoxyethoxymethoxy) naphthalene-2-carboxylic acid using 1-hydroxybenzotriazole, Et3N, and 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide hydrochloride in CH2Cl2 at room temp. for 3 h to give 1.97 g (62%) of 6-(2-methoxyethoxymethoxy)-N-[4'-(2,4-dioxothiazolidin-5-ylmethyl)biphenyl-3-ylmethyl]-N-methylnaphthalene-2-carboxamide (II). II in vitro activated PPAR.alpha. and PPAR.gamma. receptors expressed in Hela cells by 22.9 and 93.3%, resp., with AC50 of >50,000.0 and 0.55 nM, resp. (AC50 = <math>50% activation of the basal signal relative to the ref. agonist (-)-3-[4-[2-(benzoxazol-2-ylmethylamino)ethoxy]phenyl]-2-ethoxypropionic acid). Various formulations contg. specific I compds., e.g. tablet contg. II, were illustrated.

- L7 ANSWER 5 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:527541 CAPLUS
- DN **139:79171**
- TI Phenylurea derivatives as vanilloid VR1 receptor antagonists and pharmaceuticals containing them
- IN Yura, Takeshi; Motegi, Muneto; Ikegami, Yuka; Masuda, Tsutomu; Kokubo, Toshio; Urbahns, Klaus; Yoshida, Osahiro; Marushige, Makiko; Shiroo, Masahiro; Tajimi, Masaomi; Takeshita, Keisuke; Moriwaki, Toshiya; Tsukimi, Yasuhiro
- PA Bayer A.-G., Germany
- SO Jpn. Kokai Tokkyo Koho, 136 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese

FAN.CNT 2

| 22200 | PATENT | NO. | | KI | ND . | DATE | | | A | PPLI | CATI | ON NO | 0. | DATE | | | | |
|-------|--------------------|-------|-----|--------------|------|-------|------|-----|-----|-------|------|--------------|-----|------|------|-----|-----------------|--|
| PI | JP 2003
WO 2003 | 05584 | 48 | A: | 2 | 2003 | 0710 | | | | | 9503
P142 | _ | 2001 | | | | |
| | WO 2003 | 05584 | 48 | \mathbf{A} | 3, | 2003: | 1023 | | | | | | | | | | | |
| | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | | | | | | | | | | | | | GB, | | | | |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NZ, | OM, | PH, | |
| | | | - | | | | | | | | | | | TN, | | | | |
| | | UA, | UG, | US, | UZ, | VC, | VN, | ΥU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | |
| | | RU, | TJ, | TM | | | | | | | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | ΑT, | BE, | BG, | |
| | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | |
| | | PT, | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | \mathtt{ML} , | |
| | | MR, | NE, | SN, | TD, | TG | | | | | | | | | | | | |
| | | | | | | | | | .т | P 201 | 01-3 | 9503 | 2 A | 2001 | 1226 | | | |

JP 2001-395032 A 20011226 JP 2001-395033 A 20011226

PATENT FAMILY INFORMATION:

FAN 2003:525400

| 2003:323400 | | | | |
|---------------|---|--|---|--|
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| | | | | |
| JP 2003192660 | A2 | 20030709 | JP 2001-395033 | 20011226 |
| WO 2003055848 | A2 | 20030710 | WO 2002-EP14216 | 20021213 |
| WO 2003055848 | A 3 | 20031023 | | |
| | PATENT NO. JP 2003192660 WO 2003055848 | PATENT NO. KIND JP 2003192660 A2 WO 2003055848 A2 | PATENT NO. KIND DATE JP 2003192660 A2 20030709 WO 2003055848 A2 20030710 | PATENT NO. KIND DATE APPLICATION NO. JP 2003192660 A2 20030709 JP 2001-395033 WO 2003055848 A2 20030710 WO 2002-EP14216 |

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
```

JP 2001-395032 A 20011226 JP 2001-395033 A 20011226

os MARPAT 139:79171

GI

The phenylurea derivs. I (X = Ph, benzyl, pyridyl, carbazolyl, fluorenyl,AΒ thienyl, pyrimidyl benzodioxolyl, indazolyl, quinolyl, naphthyl, or naphthyl-C1-6 alkyl, among them, (hetero)arom. group is optionally substituted with R1, R2, R3; R1, R2, R3 = H, halo, C1-6 alkyl, C1-6 haloalkyl, NO2, cyano, C1-6 alkoxy, OH, piperidino, furyl, thienyl, benzyloxy, anilino, C1-6 alkylcarbamoyl, etc.), their tautomers, their stereoisomers, or their salts are claimed. Also claimed are pharmaceuticals contg. I, their tautomers, their stereoisomers, or their salts for prophylaxis and/or treatment of urge incontinence, overactive bladder, chronic pain, neuropathic pain, postoperative pain, rheumatoid arthritis pain, neuralgia, neuropathies, hyperesthesia, nerve injury, ischemia, neurodegeneration, stroke, incontinence, inflammatory disorders, etc. N-(3,4-Dichlorophenyl)-N'-[2-(2-hydroxyethyl)phenyl]urea, prepd. from 2-H2NC6H4CH2CH2OH and 3,4-Cl2C6H3NCO, inhibited capsaicin-induced Ca2+ influx into CHO cells expressing human VR1 receptors at IC50 .ltoreq.0.1 .mu.M.

- L7 ANSWER 6 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:492185 CAPLUS
- DN 139:69254
- TI Preparation of 4-(2,4-dioxothiazolidin-5-ylmethyl)biphenyl derivatives as new ligand activators of PPAR.gamma. receptors for use in human medicine and in cosmetics
- IN Bernardon, Jean Michel; Clary, Laurence
- PA Galderma Research & Development, Fr.
- SO Fr. Demande, 50 pp.

Patel

```
CODEN: FRXXBL
DT
       Patent
LΑ
       French
FAN.CNT 2
       PATENT NO. KIND DATE APPLICATION NO. DATE
       FR 2833949 A1 20030627 FR 2001-16750 20011221 WO 2003055867 A1 20030710 WO 2002-FR4232 20021209
PΙ
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                 CO, CR, CO, CZ, DE, DR, DFI, DZ, EC, EE, ES, FI, GB, GD, GE, GN, GR, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PI, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
                 RU, TJ, TM
            RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
                 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                        FR 2001-16750 A 20011221
      US 2003134885
                           Al 20030717
                                                       US 2002-326054 20021223
                                                        FR 2001-16750 A 20011221
                                                        US 2002-351425PP 20020128
                                                        FR 2002-2647 A 20020301
PATENT FAMILY INFORMATION:
FAN 2003:551189
      PATENT NO.
                           KIND DATE APPLICATION NO. DATE
      US 2003134885 A1 20030717
      -----
                                                      ______
PΙ
                                                       US 2002-326054 20021223
                                                       FR 2001-16750 A 20011221
                                                       US 2002-351425PP 20020128
                                                       FR 2002-2647 A 20020301
      FR 2833949 A1 20030627
FR 2836683 A1 20030905
                                                       FR 2001-16750 20011221
FR 2002-2647 20020301
os
      MARPAT 139:69254
GI
```

The title compds. [I; R1 = II, CH2CHR6COR5; R2, R3 = H, alkyl, aryl, etc.; X = CH2NR8CO, NR8CONR9, NR8COCH2, NR8CH2CO; R4 = (un)substituted Ph, CH2Ph, thienyl, etc.; R5 = OH, alkoxy; R6 = alkyl, alkoxy, thioxy, aryloxy, etc.; R8 = H, alkyl; R9 = H, alkyl], useful in pharmaceutical compns. intended for a use in medicine human or veterinary (in dermatol., in the field of the cardiovascular diseases, the immunizing diseases and/or the diseases related to the metab. of the lipids), or in cosmetic compns., were prepd. and formulated. Thus, reacting 5-(3'-methylaminomethylbiphenyl-4-ylmethyl)thiazolidine-2,4-dione (multi-step synthesis given) with cyclopentanepropionyl chloride afforded 25% III which showed Kd of 250.0 nM against PPAR.gamma. receptor binding.

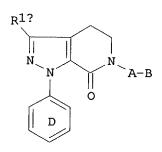
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

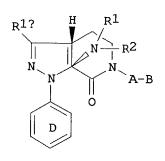
L7 ANSWER 7 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

ALL CITATIONS AVAILABLE IN THE RE FORMAT

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

```
2003:472339 CAPLUS
     139:53014
TI
     Synthesis of 4,5-dihydro-pyrazolo[3,4-c]pyrid-2-ones
IN
     Zhou, Jiacheng; Oh, Lynette M.; Ma, Philip; Li, Hui-yin
PA
     Bristol-Myers Squibb Company, USA
SO
     PCT Int. Appl., 143 pp.
     CODEN: PIXXD2
DT
     Patent
ĽΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                                                             _____
ΡI
     WO 2003049681
                       A2
                             20030619
                                            WO 2002-US38559 20021203
     WO 2003049681
                       A3
                            20030918
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
                                           US 2001-339085PP 20011210
     US 2003181466
                       Α1
                            20030925
                                           US 2002-308741
                                                             20021203
                                           US 2001-339085PP 20011210
OS
    MARPAT 139:53014
GΙ
```





II

$$\begin{array}{c} \text{HN-N} \\ \\ \text{D} \end{array}$$

Ι

III

$$R^{1}-N$$
 R^{2}
 N
 $A-B$
 IV

AB A novel process and intermediates thereof for making 4,5-dihydro-pyrazolo[3,4-c]pyrid-2-ones (shown as I; variables defined below; e.g. 1-(4-methoxyphenyl)-7-oxo-6-[4-(2-oxopiperidin-1-yl)phenyl]-4,5,6,7-

tetrahydro-1H-pyrazolo[3,4-c]pyridine-3-carboxylic acid amide) from appropriate Ph hydrazines is described. These compds. are useful as factor Xa inhibitors (no data). I are made from II using an acid, e.g. trifluoroacetic, sulfuric, nitric, hydrochloric. For example, 1-(3-cyano-4-fluorophenyl)-3-trifluoromethyl-6-(4-iodophenyl)-1,4,5,6tetrahydro-7H-pyrazolo[3,4-c]pyridin-7-one was prepd. (95% yield) from 1-(3-cyano-4-fluorophenyl)-3-trifluoromethyl-6-(4-iodophenyl)-8-morpholino-1,4,5,6,8,9-hexahydro-7H-pyrazolo[3,4-c]pyridin-7-one (1.0 mmol) in CH2Cl2 on treatment with CF3CO2H (2.0 mL). II are made from III and IV in the presence of base (e.g. triethylamine, diisopropylethylamine, and N-methylmorpholine). For example, 1-(3-cyano-4-fluorophenyl)-3trifluoromethyl-6-(4-iodophenyl)-8-morpholino-1,4,5,6,8,9-hexahydro-7Hpyrazolo[3,4-c]pyridin-7-one was prepd. (65% yield) from 2,2-trifluoro-N-(3-cyano-4-fluorophenyl)ethanehydrazonoyl mesylate (4.0 mmol) and N-(4-iodophenyl)-3-morpholino-5,6-dihydro-2H-pyridin-2-one (4.0 mmol) in toluene (18 mL) in the presence of N-methylmorpholine (16.0 mmol). For I-IV: ring D = 4-chlorophenyl, 4-methoxyphenyl, 2-cyanophenyl, 2-(aminomethyl)phenyl, 2-(PgNHCH2)phenyl, 3-cyanophenyl, 3-(aminomethyl)phenyl, 3-(PgNHCH2)phenyl, 3-cyano-4-fluorophenyl, (3-amino)benz[d]isoxazol-6-yl, and (3-PgNH)benz[d]isoxazol-6-yl (Pg is an amine protecting group). R1 and R2 = C1-6 alkyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, Ph, and benzyl; alternatively, NR1R2 is a 3-8 membered ring consisting of C atoms, N, and 0-1 O atoms; Rla = H, CH3, CH2CH3, CH2CH2CH3, CH2F, CH2Cl, Br, CH2Br, CN, CH2CN, CF3, CH2CF3, CH2OCH3, CO2CH3, CH2CO2CH3, CO2CH2CH3, CH2CO2CH2CH3, CH2SCH3, S(0)CH3, CH2S(O)CH3, S(O)2CH3, CH2S(O)2CH3, C(O)NH2, CH2C(O)NH2, SO2NH2, CH2SO2NH2, pyridin-2-yl, pyridin-3-yl, pyridin-4-yl, pyridin-2-yl N-oxide, pyridin-3-yl N-oxide, pyridin-4-yl N-oxide, imidazol-1-yl, CH2-imidazol-1-yl, 1,2,3,4-tetrazol-1-yl, 1,2,3,4-tetrazol-5-yl, CH2-1,2,3,4-tetrazol-1-yl, and CH2-1,2,3,4-tetrazol-5-yl, provided that Rla forms other than an N-halo, N-N, N-S, N-O, or N-CN bond. A = Ph substituted with 0-1 R4, pyridyl substituted with 0-1 R4, and pyrimidyl substituted with 0-1 R4; B = B1, Cl, Br, I, OMs, OTs, OSO2Ph, CH2Br, CH2OH, and CHO; alternatively, A-B is H; B1 is Y or X-Y; X = C1-4alkylene, -CR2(CHR2R2b)(CH2)t-, -C(0)-, -CR2(OR2)-, -CR2(SR2)-, -C(0) CR2R2a-, -CR2R2aC(0), -S(0)p-, -S(0)pCR2R2a-, -CR2R2aS(0)p-, -S(0)2NR2-, -NR2S(0)2-, -NR2S(0)2CR2R2a-, -CR2R2aS(0)2NR2-, -NR2S(0)2NR2-, -C(O)NR2-, -NR2C(O)-, -C(O)NR2CR2R2a-, -NR2C(O)CR2R2a-, -CR2R2aC(O)NR2-, -CR2R2aNR2C(0)-, -NR2C(0)0-, -OC(0)NR2-, -NR2C(0)NR2-, -NR2-, -NR2CR2R2a-, -CR2R2aNR2-, O, -CR2R2aO-, and -OCR2R2a-. Y = C3-10 carbocycle substituted with 0-2 R4a, and 5-10 membered heterocycle contg. = 1-4heteroatoms N, O, and S, substituted with 0-2 R4a; addnl. details are given in the claims. For III: Z = Cl, Br, I, OSO2Me, OSO2Ph, OSO2C6H4Me-p.

- L7 ANSWER 8 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:414216 CAPLUS
- DN 139:6766
- TI Preparation of indole-2-carboxamides as factor Xa inhibitors
- IN Nazare, Marc; Essrich, Melanie; Will, David William; Matter, Hans; Ritter, Kurt; Wehner, Volkmar
- PA Aventis Pharma Deutschland Gmbh, Germany
- SO Eur. Pat. Appl., 90 pp. CODEN: EPXXDW
- DT Patent
- LA English
- FAN.CNT 1

GI

| | PATENT NO. | KIND DATE | APPLICATION NO. DATE |
|-----|--|---|---|
| PI | R: AT, BE,
IE, SI, | CH, DE, DK, ES,
LT, LV, FI, RO, | EP 2001-127809 20011122
FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
MK, CY, AL, TR |
| | WO 2003044014 | A1 20030530 | WO 2002-EP12500 20021108 |
| | W: AE, AG,
CO, CR,
GM, HR,
LS, LT,
PL, PT, | AL, AM, AT, AU, CU, CZ, DE, DK, HU, ID, IL, IN, LU, LV, MA, MD, RO, RU, SD, SE, | AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, |
| 0.0 | CH, CY,
PT, SE,
NE, SN,
US 2003199689 | CZ, DE, DK, EE,
SK, TR, BF, BJ,
TD, TG Al 20031023 | SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, EP 2001-127809 A 20011122 US 2002-301397 20021121 EP 2001-127809 A 20011122 |
| os | MARPAT 139:6766 | | |

$$R^{5}$$
 R^{6}
 R^{7}
 N
 $N-R^{2}-V-G-M$
 R^{3}
 Q
 R^{1}

AB The title compds. [I; R0 = (un)substituted monocyclic or bicyclic 6-14 membered aryl, monocyclic or bicyclic 5-14 membered heteroaryl, etc.; Q = a bond, CO, SO2, etc.; R1 = H, alkyl; R2 = a bond, alkylene; R1 and R2 together with the N atom and V to which they are bonded form (un)substituted 5-7 membered cyclic group contg. up to 1-4 heteroatoms chosen from N, S or O; V = (un)substituted 3-7 membered cyclic residue contg. up to 1-4 heteroatoms chosen from N, S or O, 6-14 membered aryl,

II

Ι

Patel

etc.; G = a bond, (CH2)m, (CH2)mO(CH2)n, etc.; n, m = 0-6; M = H, alkyl, aryl, etc.; R3-R7 = H, halo, alkyl, etc.] which exhibit a strong antithrombotic effect and are suitable, for example, for the therapy and prophylaxis of cardiovascular disorders like thromboembolic diseases or restenoses, were prepd. Thus, amidation of 1-[5-(5-chlorothiophen-2yl)isoxazol-3-ylmethyl]-1H-indole-2-carboxylic acid with 1-isopropylpiperidin-4-ylamine.HCl (prepns. given) in the presence of BOP-Cl, Et3N and DCM afforded II which showed Ki of 0.0033 .mu.M against factor Xa. The compds. I are reversible inhibitors of the blood clotting enzymes factor Xa (FXa) and/or factor VIIa (FVIIa), and can in general be applied in conditions in which an undesired activity of factor Xa and/or factor VIIa is present or for the cure or prevention of which an inhibition of factor Xa and/or factor VIIa is intended. The invention furthermore relates to processes for the prepn. of compds. I, their use, in particular as active ingredients in pharmaceuticals, and pharmaceutical prepns. comprising them.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7
    ANSWER 9 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2003:301073 CAPLUS

DN 138:321300

Preparation of cyclic sulfone derivatives as inhibitors of matrix TI metalloproteinases, aggrecanase and/or TNF-.alpha. converting enzyme

Duan, Jingwu; Xue, Chu-Biao IN

Bristol-Myers Squibb Company, USA PA

SO PCT Int. Appl., 115 pp. CODEN: PIXXD2

DTPatent

LΑ English

```
FAN.CNT 1
        PATENT NO.
                                  KIND DATE
                                                                     APPLICATION NO. DATE
                                                                      _____
                                  A1 20030417 W0 2002-US32168 20021007
ΡI
       WO 2003031431
              W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                    AE, AG, AL, AT, AU, AZ, BA, BB, BG, BK, BI, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
                     TJ, TM
              RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
                     PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
                     NE, SN, TD, TG
                                                                       US 2001-327816PP 20011009
       US 2003149031
                                     A1
                                              20030807
                                                                      US 2002-265876 20021007
                                                                      US 2001-327816PP 20011009
```

OS MARPAT 138:321300

GΙ

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The present formula application describes novel cyclic sulfone derivs. (shown as I; variables defined below; e.g. N-hydroxy-2-[4-isopropyl-2-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-1,1-dioxido-2thiomorpholinyl]acetamide (shown as II)) or pharmaceutically acceptable salt or prodrug forms thereof, which are useful as inhibitors of matrix metalloproteinases (MMP), TNF-.alpha. converting enzyme (TACE), aggrecanase, or a combination thereof. Although the methods of prepn. are not claimed, 1 example prepn. is included and 19 specific I are mentioned in the claims. For I: A = COR5, CO2H, CO2R6, C(O)NHOH, C(O)NHOR5, C(O)NHOR6, NHRa, N(OH)COR5, N(OH)CHO, SH, CH2SH, S(O)(:NH)Ra, S(:NH)2Ra, SC(O)Ra, PO(OH)2, and PO(OH)NHRa. Ring B, including the shown C and sulfonyl groups, is a 4-8 membered heterocycle consisting of C atoms and, in addn. to the sulfonyl group shown, 0-2 heteroatoms = O, N, NR10, and S(0)p, provided that ring B contains other than a S-S, O-O, or S-O bond; ring B consists of 0-1 double bonds and is substituted with 0-2 Rb. X is absent or is CR3R4; Ua is absent or = 0, NRa1, C(0), C(0)0, OC(0), C(0)NRa1, NRa1C(0), OC(0)O, OC(0)NRa1, NRa1C(0)O, NRa1C(0)NRa1, S(0)p, S(0)pNRa1, NRa1S(0)p, and NRa1SO2NRa1; Xa is absent or = C1-4 alkylene, C2-4 alkenylene, and C2-4 alkynylene; Ya is absent or = 0, NRa1, S(0)p, and C(O); provided that Ua-Xa-Ya form other than a bond or O; Za is a C3-13 carbocycle substituted with 0-5 Rc or a 5-14 membered heterocycle consisting of C atoms and 1-4 heteroatoms N, O, and S(O)p, and substituted with 0-5 Rc; provided that Ua, Ya and Za do not combine to form a N-N, N-0, O-N, O-0, S(O)p-0, O-S(O)p or S(O)p-S(O)p group. R1 = H, C1-6 alkyl substituted with 0-1 Rb, C2-6 alkenyl substituted with 0-1 Rb, and C2-6 alkynyl substituted with 0-1 Rb; R2 = Q, C1-6 alkylene-Q, C2-6alkenylene-Q, C2-6 alkynylene-Q, (CRaRa1)r10(CRaRa1)r-Q, (CRaRa1) r1NRa (CRaRa1) r-Q, (CRaRa1) r1C(O) (CRaRa1) r-Q,(CRaRa1)r1C(0)O(CRaRa1)r-Q, (CRaRa1)r1OC(0)(CRaRa1)r-Q, (CRaRa1) r1C(0) NRaRa1, (CRaRa1) r1C(0) NRa(CRaRa1) r-Q, (CRaRa1) r1NRaC(0) (CRaRa1) r-Q, (CRaRa1) r1OC(0) O (CRaRa1) r-Q,(CRaRa1) r10C(0) NRa(CRaRa1) r-Q (CRaRa1) r1NRaC(0) O(CRaRa1) r-Q, (CRaRa1)r1NRaC(0)NRa(CRaRa1)r-Q, (CRaRa1)r1S(0)p(CRaRa1)r-Q, (CRaRal)r1SO2NRa(CRaRal)r-Q, (CRaRal)r1NRaSO2(CRaRal)r-Q, and (CRaRa1)r1NRaSO2NRa(CRaRa1)r-Q; Q = H, a C3-13 carbocycle substituted with 0-5 Rd, and a 5-14 membered heterocycle consisting of C atoms and 1-4 heteroatoms N, O, and S(O)p, and substituted with 0-5 Rd; alternatively, R1 and R2, together with the C atom to which they are attached, combine to form a 3-10 membered heterocyclic ring consisting of C atoms and 0-2 ring heteroatoms = 0, N, NR10, and S(0)p, and substituted with 0-3 Rc;. Rb = C1-6 alkyl substituted with 0-1 Rc1, ORa, Cl, F, Br, I, O, CN, NO2, NRaRal, C(O)Ra, C (O)ORa, C(O)NRaRal, C(S)NRaRal, NRaC(O)NRaRal, OC(O)NRaRa1, NRaC(O)ORa, S(O)2NRaRa1, NRaS(O)2Ra3, NRaS(O)2NRaRa1, OS(O)2NRaRa1, NRaS(O)2Ra3, S(O)pRa3, CF3, CF2CF3, CHF2, CH2F, and phenyl; q = 0-2; addnl. details are given in the claims. A no. of I exhibit Ki's of <10 .mu.M in a metalloproteinase assay (specific compds. not mentioned).

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 10 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:300876 CAPLUS
- DN 138:321573
- TI Preparation of p-aminobenzoic acid amino acid derivatives as integrin antagonists
- IN Lehmann, Thomas; Albers, Markus; Roelle, Thomas; Mueller, Gerhard; Hessler, Gerhard; Tajimi, Masaomi; Ziegelbauer, Karl; Okigami, Hiromi;

Bacon, Kevin; Hasegawa, Haruki Bayer Aktiengesellschaft, Germany

SO PCT Int. Appl., 107 pp. CODEN: PIXXD2

DT Patent

LΑ English

FAN.CNT 1

PA

os

GΙ

| | PAT | ENT | | KI | ND | DATE | | | A | PPLI | CATI | ON N | 0. | DATE | | | | |
|----|-----|------------------|-----|-----|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|-----|
| | | | | | | | | | | _ | | | | | | | | |
| ΡI | WO | 2003 | | | | | 2003 | | | | | | | | 2002 | | | |
| | | W: | ΑE, | AG, | AL, | ΑM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH. | CN. |
| | | CO, CR
GM, HR | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH. |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | J₽, | ΚE, | KG, | KP, | KR, | KZ, | LC, | LK. | LR. |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ. | OM. | PH. |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TN, | TR. | TT. | TZ. |
| | | | UA, | ŬĠ, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG. | KZ. | MD. |
| | | | RU, | ТJ, | TM | | | | | | | | - | • | • | • | • | , |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE. | BG. |
| | | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU. | MC. | NL. |
| | | | PT, | SE, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW. | ML. | MR. |
| | | | NE, | SN, | TD, | ΤG | | | | | | | - | • | ~. | • | | |

MARPAT 138:321573

$$R^{2}$$
 R^{2}
 R^{4}
 R^{5}
 R^{5}
 R^{7}
 R^{6}
 R^{6}
 R^{7}
 R^{6}
 R^{7}
 R^{6}

The invention relates to p-aminobenzoic acid derivs. I or their AΒ pharmaceutically-acceptable salts as .alpha.4.beta.1, .alpha.4.beta.7, and/or .alpha.9.beta.1 integrin antagonists for the prodn. of pharmaceutical compns. suitable for the inhibition or prevention of cell adhesion and cell-adhesion mediated disorders. Thus, compd. II was prepd. by the solid-phase method and showed IC50 .1toreq. 0.5 .mu.M in the VCAM-1assay.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

Patel

II

GB 2001-23765 A 20011003

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:42250 CAPLUS

DN 138:106712

TI Preparation of pyrazine-2-carboxamides as glycogen synthase kinase-3 (GSK3) inhibitors

IN Berg, Stefan; Hellberg, Sven

PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

| CAM. | | _ | | | *** | | | | | - | | ~~ == | | _ | | | | |
|------|----|--------|------|------------------------|-------|-------|------|------|-----|-----|------|-------|-------|-----|------|------|-----|-----|
| | PA | CENT I | NO. | | KI | ND | DATE | | | A | 55TT | CATT | ON NO | ٥. | DATE | | | |
| ΡI | WO | 2003 | 0044 | 72 |
A |
1 | 2003 | 0116 | | W | 20 | 02-s | E133 | 9 | 2002 | 0703 | | |
| | WO | 2003 | 0044 | 72 | C | 1 | 2003 | 0313 | | | | | | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, |
| | | | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, |
| | | | ТJ, | $\mathbf{M}\mathbf{T}$ | | | | | | | | | | | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | ŪG, | ZM, | ZW, | ΑT, | BE, | BG, |
| | | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | ΝL, |
| | | | PT, | SE, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, |
| | | | NE, | SN, | TD, | TG | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

SE 2001-2439 A 20010705

OS MARPAT 138:106712

GI

$$\begin{array}{c|c}
 & \text{NH}_2 \\
 & \text{Y} \\
 & \text{[R3]}_n
\end{array}$$

$$\begin{array}{c|c}
N & NH2 \\
N & NH2 \\
N & NH2
\end{array}$$
II

AB The title compds. [I; Z = CH, N; Y = CONR5, NR5CO, SO2NR5, etc.; X = CH,

Patel

N; P = Ph or 5-6 membered heteroaryl which may optionally be fused with 5-6 membered (un)satd. ring contg. one or more atoms selected from C, N, O or S; Q = Ph or 5-6 membered heteroaryl contg. one or more heteroatoms selected from N, O or S of which at least one atom is selected from N atom; R = CHO, OCH2F, OCHF2, OCF3, etc.; R3, R4 = halo, NO2, CHO, etc.; n, m = 0-4], useful in the prevention and/or treatment of conditions assocd. with glycogen synthase kinase-3, were prepd. and formulated. Thus, coupling 3-amino-6-bromo-N-(pyridin-3-yl)pyrazine-2-carboxamide with 4-(pyrrolidin-1-ylsulfonyl)phenylboronic acid (prepns. given) in the presence of Pd(dppf)Cl2 and Na2CO3 in dimethoxyethane afforded 93% the carboxamide II. Typical Ki values for the compds. I are in the range of about 0.001 to about 10,000 nM.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7 ANSWER 12 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2003:22869 CAPLUS

DN 138:89806

TI Preparation of arylpyrazoles as soluble epoxide hydrolase inhibitors for treatment of cardiovascular disease.

IN Ingraham, Richard H.; Proudfoot, John R.

PA Boehringer Ingelheim Pharmaceuticals Inc., USA

SO PCT Int. Appl., 44 pp. CODEN: PIXXD2

DT Patent

LA English

FAN CNT 1

| L'EMA | CIAT | _ | | | | | | | | | | | | | | | | | |
|-------|------|--------|-------|-----|-----|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|----|
| | PA! | CENT I | NO. | | KI | ND | DATE | | | A. | PPLI | CATI | N MC | 0. | DATE | | | | |
| | | | | | | | | | | | ~ | | | | | | | | |
| ΡI | WO | 2003 | 0025 | 55 | A. | 1 | 2003 | 0109 | | W | 20 | 02-U | S187 | 52 | 2002 | 0614 | | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, | |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | ΝZ, | OM, | PH, | |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TN, | TR, | TT, | TZ, | |
| | | | UA, | UG, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | ŪG, | ZM, | ZW, | AT, | BE, | CH, | |
| | | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | |
| | | | BF, | ΒJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | ΝE, | SN, | TD, | TG | |
| | | | | | | | | | | U: | 5 20 | 01-3 | 0206 | 6PP | 2001 | 0629 | | | |
| | US | 2003 | 02292 | 29 | A. | 1. | 2003 | 0130 | | U: | 5 20 | 02-1 | 7245 | 7 | 2002 | 0614 | | | |
| | | | | | | | | | | U: | S 20 | 01-3 | 0206 | 6PP | 2001 | 0629 | | | |

OS MARPAT 138:89806

GI

$$\begin{array}{c|c} & & & \\ & & & \\ R^2 & & & \\ & & N & \\ & & & \\ R^8 & & & 1 \end{array}$$

AB A method of treating cardiovascular disease comprises administration of title compds. [I; R1, R3 = CF3, halo, cyano, alkyl, alkenyl, alkynyl,

(substituted) cycloalkyl, heterocyclyl, etc.; R2 = H, halo, Me; L = NHCO, NHCS, NH, NHCH2, NHCOCO, etc.; R4 = (substituted) alkyl, alkoxy, alkylthio, alkylamino, alkoxyalkyl, alkylthioalkyl, carbocyclyl, heterocyclyl, etc.; R8 = H, NH2] (no data). Thus, 2-chloronicotinic acid in MeCN was treated with EDC and then with 1-(4-aminophenyl)-3-(3-pyridyl)-5-trifluoromethylpyrazole under ice cooling followed by stirring for 1 h to give I (R1 = 3-pyridyl; R2, R8 = H; R3 = CF3; L = NHCO; R4 = 2-chloropyridin-3-yl).

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:695939 CAPLUS

DN 137:232452

TI Preparation of benzamidines having antiinflammatory and immunosuppressive activity

IN Makovec, Francesco; Zanzola, Simona; Artusi, Roberto; Rovati, Lucio Claudio

PA Rotta Research Laboratorium S.p.A., Italy

SO PCT Int. Appl., 43 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PA | rent i | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ои ис | 0. | DATE | | | |
|----|-------|--------|------|-----|-----|-----|------|------|-----|-----|------|------|-------|-----|------|------|-----|-----|
| PI | • • • | 2002 | | | | _ | 2002 | | | W | 20 | 02-E | P120 | 1 | 2002 | 0206 | | |
| | WO | 2002 | 0704 | 68 | А | 3 | 2003 | 0904 | | | | | | | | | | |
| | | W: | ΑE, | AG, | ΑL, | AM, | ΑT, | ΑU, | ΑZ, | ВA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | TZ, |
| | | | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG, | KZ, | MD, | RU, |
| | | | ТJ, | TM | • | | - | | | • | | | | | | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | CH, |
| | | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| | | | | | | | | | | I' | r 20 | 01-T | 0110 | Α | 2001 | 0208 | | |
| | EP | 1363 | 875 | | A | 2 | 2003 | 1126 | | E | P 20 | 02-7 | 1809 | 6 | 2002 | 0206 | | |
| | | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR | | | | | | |
| | | | • | · | | | | | | ľ | r 20 | 01-т | 0110 | Α | 2001 | 0208 | | |

WO 2002-EP1201 W 20020206

OS CASREACT 137:232452; MARPAT 137:232452

GI

$$(R^2R^3R^4C)$$
 n $\stackrel{A}{\underset{H}{\bigvee}}$ $\stackrel{R^5}{\underset{H}{\bigvee}}$ $\stackrel{R^1}{\underset{NH}{\bigvee}}$

```
AB Title compds. [I; A = carboxamide, thiocarboxamide, carbonyl; R1 = alkyl, amino, optionally substituted with NO2 or Me; R2 = H, alkyl, MeO, EtO, PrO, mono-, bi- or tricyclic cycloalkyl having 5-12 C atoms, adamantyl, aryl, naphthyl, heterocyclyl optionally substituted with Me, MeO, OH, amino, halo; R3, R4 = H, alkyl; R5 = 1-2 of H, Me, MeO, OH; n = 0-6; the amidine groups is in the para or meta position relative to the ANH group], were prepd. Thus, di-N-(4-aminophenyl)-N'-pentylthiourea, Et3N, Me acetimidate hydrochloride were stirred 24 h in THF to give N-[4-(n-acetamidine)Ph]-N'-pentylthiourea. The latter inhibited NO prodn. in rabbit joint chondrocytes with IC50 = 6.6 .mu.M.
```

```
L7 ANSWER 14 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2002:695933 CAPLUS

DN 137:232445

TI Preparation of aminodicarboxylic acids for the treatment of cardiovascular diseases

IN Alonso-Alija, Cristina; Haerter, Michael; Hahn, Michael; Pernerstorfer, Josef; Weigand, Stefan; Stasch, Johannes-Peter; Wunder, Frank

PA Bayer Aktiengesellschaft, Germany

SO PCT Int. Appl., 162 pp. CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

```
PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
                           20020912
PΙ
    WO 2002070462
                    A1
                                        WO 2002-EP1941 20020225
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                          DE 2001-10110749A 20010307
     DE 10110749
                      A1
                           20020912
                                          DE 2001-10110749 20010307
                                          EP 2002-703602 20020225
     EP 1368300
                      A1
                           20031210
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          DE 2001-10110749A 20010307
                                          WO 2002-EP1941 W 20020225
```

OS MARPAT 137:232445

GI

AB Title compds. I [V = absent, O, COO, etc.; Q = absent, (un)substituted alkylene, alkendiyl, etc; Y = H, NR8R9, (un)substituted aryl, etc.; W = (un)substituted alkylene, alkendiyl; U = (un)substituted alkyl; A = (un)substituted aryl, heteroarom. contg. 1-3 heteroatoms, e.g., S, N, O; X

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

```
= (un) substituted alkylene, alkendiyl, aryl, etc.; R1 = tetrazolyl, COOR30, CONR31R32; R2 = tetrazolyl, COOR24, CONR25R26, R25 and R26 form 5 or 6-membered ring which can be interrupted by 0 or N; R3 = aryl, SR17, SO2R17, etc.; R8, R9, R17 = H, (un) substituted alkyl, alkenyl, etc.; R24 = H, (un) substituted alkyl, cycloalkyl; R25, R26 = H, (un) substituted alkyl, cycloalkyl, etc.; R30 = H, (un) substituted alkyl, cycloalkyl; R31, R32 = H, (un) substituted alkyl, cycloalkyl, etc.; m = 1-4; n = 1-2] and their pharmaceutically acceptable salts were prepd. For example, Pd(Ph3)2Cl2 mediated coupling of aryl bromide II, prepd. from ethyl-2-hydroxy-5-trifluoromethoxybenzoate in 8-steps, with 4-chlorophenyl boronic acid, followed by ester hydrolysis afforded aminodicarboxylate III. Compds. I stimulated the activation of sol. guanylate cyclase (sGC) independent of the heme group (no data).
```

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7 ANSWER 15 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2002:675840 CAPLUS

DN 137:226590

TI Use of epothilone derivatives and a signal transduction inhibitor for the treatment of cancer

IN Buchdunger, Elisabeth; Heldin, Carl-Henrik; Oestman, Arne; Pietras, Kristian; O'Reilly, Terence; Rothermel, John David; Traxler, Peter; Wartmann, Markus

PA Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.; Brandt, Ralf

SO PCT Int. Appl., 24 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

```
PATENT NO.
                   KIND DATE
                                     APPLICATION NO. DATE
    ------
                                       -----
                         20020906
    WO 2002067941
                   A2
                                      WO 2002-EP2049
PI
                                                       20020226
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
           CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
           HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU,
           LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG,
           SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VN, YU, ZA, ZW, AM, AZ,
           BY, KG, KZ, MD, RU, TJ, TM
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
           PT, SE, TR
                                       GB 2001-4840
                                                   A 20010227
                                       US 2001-339040PP 20011030
    NO 2003003769
                    Α
                         20030825
                                       NO 2003-3769
                                                       20030825
                                       GB 2001-4840
                                                    A 20010227
                                       US 2001-339040PP 20011030
                                       WO 2002-EP2049 W 20020226
```

OS MARPAT 137:226590

GI

$$R^{7}$$
 R^{6} R^{7} R^{6} R^{7} R^{6} R^{7} R^{6} R^{7} R^{7} R^{8} R^{8} R^{8} R^{8} R^{8} R^{9} R^{9

The present invention relates to a combination which comprises (a) a AΒ signal transduction inhibitor selected from a PDGF (platelet-derived growth factor) receptor tyrosine kinase inhibitor which is a N-phenyl-2-pyrimidine-amine deriv. such as I [R1 = pyrazinyl, pyrrolyl, substituted phenyl; R2, R3 = H, alkyl; R4, R5, R6, R7, R8 = nitro, alkoxy, -N(R9)-C(=X)-(Y)n-R10; R9=H, alkyl; X=oxo, thio, imino, N-alkylamino, hydroximino; Y = 0, NH; n = 0, 1; R10 = alkyl, aryl, cycloalkyl, heterocycle], and an active ingredient which decreases the activity of the epidermal growth factor (EGF) and (b) an epothilone deriv. such as II [A = O, NRn; Rn = H, alkyl; R = H, alkyl; Z = O, a bond], and optionally at least one pharmaceutically acceptable carrier for simultaneous, sep. or sequential use, in particular, for the delay of progression or treatment of a proliferative disease. The invention also discloses a com. package comprising such a combination as a combined prepn. and to a method of treatment of a warm-blooded animal, esp. human.

```
L7 ANSWER 16 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2002:594872 CAPLUS

DN 137:155180

TI Preparation of tripeptides as hepatitis C inhibitors

IN Campbell, Jeffrey Allen; Good, Andrew

PA Bristol-Myers Squibb Company, USA

SO PCT Int. Appl., 240 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN CNT 1

| FAN. | | _ | | | | | | | | _ | | ~~ == | | _ | D 3 mm | | | |
|------|----|-------|-------|-----|-----|-----|------|------|-----|-----|------|-------|------|--------|--------|------|-----|-----|
| | PA | ENT . | NO. | | K1. | עמ | DATE | | | Α. | | CATI | | o.
 | DATE | | | |
| PI | WO | 2002 | 0609 | 26 | A | 2 | 2002 | 8080 | | W | | | | 45 | 2001 | 1120 | | |
| | WO | 2002 | 0609: | 26 | Α | 3 | 2003 | 0313 | | | | | | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KΡ, | KR, | KZ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | ΜA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | PH, | PL, |
| | | | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ΤJ, | TM, | TR, | TT, | TZ, | UA, | UG, |
| | | | UΖ, | VN, | YU, | ZA, | ZW, | ΑM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | MT | | |
| | | RW: | GH, | GM, | ΚE, | LS, | , WM | ΜZ, | SD, | SL, | SZ, | TZ, | ŪG, | ZM, | ZW, | AT, | BE, | CH, |
| | | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, |
| | | | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | ΝE, | SN, | TD, | TG |
| | | | | | | | | | | Ü | s 20 | 00-2 | 4996 | 8PP | 2000 | 1120 | | |
| | US | 2002 | 1113 | 13 | Α | 1. | 2002 | 0815 | | U | S 20 | 01-1 | 850 | | 2001 | 1120 | | |
| | | | | | | | | | | U. | S 20 | 00-2 | 4996 | 8PP | 2000 | 1120 | | |
| | ΕP | 1337 | 550 | | A | 2 | 2003 | 0827 | | E | P 20 | 01-9 | 9702 | 4 | 2001 | 1120 | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2000-249968PP 20001120 WO 2001-US45145W 20011120

OS MARPAT 137:155180

GΙ

Tripeptides I [R1 = (un) substituted alkyl, cycloalkyl, alkylcycloalkyl, or aryl; m = 1 or 2; X = CH2 or CH2CH2; R2 = H or (un) substituted alkyl, alkenyl, or cycloalkyl; R3 = alkyl, phenylalkyl, alkenyl, (un) substituted cycloalkyl or alkylcycloalkyl CR3 is a cycloalkyl group optionally substituted by alkenyl; Y = H, nitrophenyl, nitropyridyl, or alkyl optionally substituted by cyano, hydroxyl, or cycloalkyl; B = H, alkyl, acyl, carbamoyl, thiocarbamoyl, or a sulfonyl group] were prepd. for the treatment of hepatitis C virus (HCV) infection. Synthetic procedures and biol. test data are given for 141 tripeptides I. Compd. I (R1 = p-AcNHC6H4, m = 2, X = CH2, R2 = vinyl, R3 = tert-Bu, B = H, Y = tert-butoxycarbonyl) showed IC50 < 0.05 .mu.M for inhibition of HCV NS3/4A protease (BMS strain) and EC50 < 0.5 .mu.M in the HCV replicon cell-based assay.

I

```
L7 ANSWER 17 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2002:504777 CAPLUS

DN 137:63180

TI Preparation of carboxamides as telomerase inhibitors

IN Hauel, Norbert; Priepke, Henning; Damm, Klaus; Schnapp, Andreas

PA Boehringer Ingelheim Pharma K.-G., Germany

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002051830 A1 20020704 WO 2001-EP14565 20011212

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,

PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 2000-10065043A 20001223

DE 10065043 A1 20020704 DE 2000-10065043 20001223 US 2002123509 A1 20020905 US 2001-25426 20011219 US 6660764 B2 20031209

DE 2000-10065043A 20001223

OS MARPAT 137:63180

AB Title compds. AR1C:CR2C(0)NR3B [R1 = H, C1-3 alkyl; R2 = H, F, C1, Br, C1-3 alkyl; R3 = H, C1-5 alkyl; A = (substituted) Ph-condensed chromanyl, chromenyl, 5-6 membered heterocyclyl; B = (substituted) 5-6 membered heteroaryl, Ph, naphthyl], were prepd. Thus, trans-3-(quinolin-6-yl)-N-(2-methoxycarbonylphenyl)but-2-enamide (prepn. given) was stirred with MeOH and 2N NaOH for 2 h at room temp. to give 92% trans-3-(quinolin-6-yl)-N-(2-carboxyphenyl)but-2-enamide. The latter at 5 .mu.M gave >50% inhibition of the telomerase activity.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:479961 CAPLUS

DN 137:41755

TI Antidiabetic agents containing amine derivatives having benzimidazole or imidazopyridine ring and their other uses

IN Fujita, Takashi; Wada, Kunio; Oguchi, Minoru; Honma, Eiji; Fujiwara, Toshihiko

PA Sankyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 109 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|------------------|----------|
| | | | | | |
| PI | JP 2002179568 | A2 | 20020626 | JP 2001-308814 | 20011004 |
| | | | | JP 2000-307159 A | 20001006 |

OS MARPAT 137:41755

GI

$$\begin{array}{c|c}
R^1 \\
NW^1 \\
R^2
\end{array}$$

$$\begin{array}{c|c}
W^2X \\
\end{array}$$

$$\begin{array}{c|c}
N \\
R^3
\end{array}$$

$$\begin{array}{c|c}
NH \\
\end{array}$$

$$\begin{array}{c|c}
0 \\
NH \\
\end{array}$$

AB Prophylactic and/or therapeutic agents for diabetes, glucose intolerance, diabetic complications, or gestational diabetes contain the derivs. I (R1 = carbamoyl which may have 1-2 .alpha., thiocarbamoyl which may have 1-2 .alpha., sulfonyl having 1 .alpha., carbonyl having 1 .alpha.; R2, R3 = H,

C1-10 alkyl, C6-10 aryl, which may have 1-3 .beta., C7-16 aralkyl which may have 1-3 .beta. on the aryl moiety; W1-W3 = direct bond, C1-8 alkylene; X, Y, Q = O, S; Z = :CH, N' Ar = benzene or naphthalene ring substituted with 1-4 L; L = H, Cl-6 alkyl, C6-10 aryl which may have 1-3 .beta., C7-16 aralkyl which may have 1-3 .beta. on the aryl moiety; definitions of .alpha. and .beta. are given) or their pharmacol. acceptable salts. I and their salts are also useful as insulin resistance improving agents, hypoglycemics, inflammation inhibitors, immunomodulators, aldose reductase inhibitors, 5-lipoxygenase inhibitors, lipid peroxide formation inhibitors, PPAR activators, antiosteoporotic agents, leukotriene antagonists, adipocyte conversion promoters, cancer cell growth inhibitors, and Ca blockers. Feeding diabetic KK mice with feed contg. 0.01% 1-(4-chlorophenyl)-3-[4-[2-[4-(2,4-dioxothiazolidin-5ylmethyl)phenoxymethyl]-1-methyl-1H-benzimidazol-6-yloxy]-2,6dimethylphenyl]thiourea (II) for 3 days showed 48.9% hypoglycemic effect. Capsules, tablets, and granules contg. II were also formulated.

```
T.7
    ANSWER 19 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
     2002:353418 CAPLUS
AN
DN
     136:355073
     Preparation of (arylacetamidophenyl)cycloalkylacetic acids as cell
ΤI
     adhesion inhibitor for treatment of inflammatory diseases
IN
    Harris, Neil Victor; Fenton, Garry
    Aventis Pharma Limited, UK
PA
SO
     PCT Int. Appl., 88 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
     _____
                           _____
                                           ______
    WO 2002036553 A2
WO 2002036553 A3
                                          WO 2001-GB4864 20011102
PΙ
                            20020510
                           20030313
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                           GB 2000-27024 A 20001104
                                           US 2000-256170PP 20001213
                                           GB 2001-24528 A 20011012
                            20020515
    AU 2002012481
                       Α5
                                           AU 2002-12481
                                                            20011102
                                           GB 2000-27024 A 20001104
                                           US 2000-256170PP 20001213
                                           GB 2001-24528 A 20011012
                                           WO 2001-GB4864 W 20011102
     EP 1330432
                       A2
                            20030730
                                           EP 2001-980688
                                                          20011102
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                           GB 2000-27024 A 20001104
                                           US 2000-256170PP 20001213
                                           GB 2001-24528 A 20011012
                                           WO 2001-GB4864 W 20011102
```

OS MARPAT 136:355073

$$R^{1}-L^{1}$$

$$L^{2}-Y$$

$$A^{1}$$

$$\begin{array}{c|c}
 & H \\
 & N \\
 & Me
\end{array}$$

$$\begin{array}{c}
 & H \\
 & N \\
 & O
\end{array}$$

$$\begin{array}{c}
 & H \\
 & N \\
 & O
\end{array}$$

$$\begin{array}{c}
 & CH_2 - CO_2H \\
 & & III
\end{array}$$

Title compds. I [wherein ring A1 = (un) substituted carbocycle, indanyl, or AB heterocycle; R1 = R3Z1-Het or R4NR5CONHAr1; R2 = H, halo, alkyl, or alkoxy; Het = (un)substituted bicyclic ring contg. at least 1 O, S, or N; R3 = (un)substituted (hetero)aryl; R4 = H or alkyl; R5 = aryl(alkyl) or heteroaryl(alkyl); or NR4R5 = cyclic amine; R6 = direct bond or alkylene, alkenylene, or alkynylene; R7 = direct bond, (hetero)cycloalkylene, (hetero)aryldiyl; C(:Z2)NR8, NR8C(:Z2), Z2, CO, C(:NOR8), NR8, NR8C(:Z2)NR8, SO2NR8, NR8SO2, OCO, CO2, NR8CO2, or OCONR8; or R6R7 = direct bond; R8 = H or alkyl; Ar1 = (hetero)aryldiyl; L1 = R6R7; L2 = alkylene; Y = carboxy or acid bioisostere; Z1 = 0 or S; and N-oxides, prodrugs, pharmaceutically acceptable salts, and solvates thereof] were prepd. as inhibitors of .alpha.4.beta.1 mediated cell adhesion for the treatment of inflammatory diseases, such as asthma. For example, coupling of [2-(o-tolylamino)benzoxazol-6-yl]acetic acid with [1-(4aminophenyl)cyclopentyl]acetic acid tert-Bu ester to give the amide, followed by deesterification with TFA, afforded II. I exhibited IC50 values in the range of 100 .mu.M to 1 nM for inhibition of cell adhesion to VCAM-1 and fibronectin with the integrin VLA-4 (.alpha.4.beta.1).

L7 ANSWER 20 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:171844 CAPLUS

DN 136:232200

TI Preparation of propenohydroxamic acid derivatives as TACE inhibitors for treatment of sepsis, infectious and autoimmune diseases, etc.

IN Hirata, Terukage; Misumi, Keiji; Ito, Kenji; Inokuma, Kenichi; Katayama, Kimiko

PA Wakunaga Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE

APPLICATION NO. DATE

Patel

<12/10/2003>

```
20020307
                                          WO 2001-JP7292 20010827
    WO 2002018326
                     A1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                           JP 2000-263094 A 20000831
                                           AU 2001-80167
    AU 2001080167
                      Α5
                            20020313
                                                            20010827
                                           JP 2000-263094 A 20000831
                                           WO 2001-JP7292 W 20010827
                            20030528
                                           EP 2001-958495
                                                            20010827
    EP 1314721
                      A1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                           JP 2000-263094 A 20000831
                                           WO 2001-JP7292 W 20010827
    MARPAT 136:232200
OS
GΙ
```

The title compds. I [R1 represents hydrogen, alkyl or halogeno; R2 represents cycloalkyl, aryl, heteroaryl, etc.; R3 represents hydrogen, alkenyl, etc.; R4 represents H, (un)substituted alkyl, etc.; R5 represents R6CO, R6SO2, R6NHCO or R6NHCS (wherein R6 represents alkyl, cycloalkyl, cyclic amino, aryl, heteroaryl, etc.); R7 represents hydrogen or a protective group; and A represents CH, nitrogen, etc.] are prepd. I are useful as drugs for preventing and/or treating diseases such as sepsis, rheumatoid arthritis, infectious diseases, autoimmune diseases, malignant neoplasm, collagen disease, etc. E-3-[3-[N-(4-methoxybenzenesulfonyl)-N-methylaminophenyl]-3-(3-pyridyl)]propenohydroxamic acid (II) in vitro showed IC50 of 7 nM against TACE. II in vitro showed IC50 of > 10000 nM against MMP-1.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 21 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:142704 CAPLUS
- DN 136:200177
- TI Preparation of diheteroaryl ureas as antitumor agents

I

IN Santora, Vent; Askew, Benny; Ghose, Arup; Hague, Andrew; Kim, Tae Seong;
Laber, Ellen; Li, Aiwen; Lian, Brian; Liu, Gang; Norman, Mark Henry;
Smith, Leon; Tasker, Andrew; Tegley, Christopher; Yang, Kevin

```
PA
       Amgen Inc., USA
        PCT Int. Appl., 371 pp.
        CODEN: PIXXD2
DT
        Patent
LA
       English
FAN.CNT 2
        PATENT NO. KIND DATE
                                                               APPLICATION NO. DATE
                                                                -----
       WO 2002014311 A2 20020221
WO 2002014311 A3 20020919
                                                                WO 2001-US25472 20010815
PI
             W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                   CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
             RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
                   BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                                US 2000-225793PP 20000815
       AU 2001084909
                                A5
                                          20020225
                                                                AU 2001-84909
                                                                                      20010815
                                                                US 2000-225793PP 20000815
                                                                WO 2001-US25472W 20010815
       EP 1309589 A2
                                          20030514
                                                                EP 2001-964009 20010815
             R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                   IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                                US 2000-225793PP 20000815
                                                                WO 2001-US25472W 20010815
PATENT FAMILY INFORMATION:
FAN 2002:965133
                               KIND DATE
                                                              APPLICATION NO. DATE
                                                               ______
       US 2002193405 A1
PΙ
                                         20021219
                                                                US 2002-77124
                                                                                       20020215
       US 6645990
                                В2
                                         20031111
                                                                US 2000-225793PP 20000815
                                                                US 2001-930753 A220010814
       US 2002173507
                                A1
                                         20021121
                                                                US 2001-930753 20010814
                                                                US 2000-225793PP 20000815
       WO 2003070727
                                A1
                                                               WO 2003-US4537 20030213
                                         20030828
             W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, ET, EP, GB, GP, HU, LE, TT, LU, MC
                   CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
                   NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
                   ML, MR, NE, SN, TD, TG
                                                               US 2002-77124 A 20020215
OS
       MARPAT 136:200177
GΙ
```

- The title compds. [I; A1-A6 = CH2, CH, C, O, S, Nh, N; X and Z taken together to form a N atom contg. ring; Y = NHCO(CH2)p, CH2CO2, NHSO2CH2, NHCO2, NHCONR6(CH2)r; R2 = alkylaminoalkynyl, cycloalkenylalkynyl, phenylalkynyl, etc.; p = 1-2; q = 0-1; r = 0-3; R6 is not defined] which are effective for prophylaxis and treatment of diseases, such as cell proliferation or apoptosis mediated diseases involving stroke, cancer and the like, were prepd. Thus, treating 3-(3-pyridyl)-4-thiazolylcarbonylazide in PhMe with a few drops of H2O afforded the urea II which showed cdk2/cyclin and cdk5/cyclin kinase activity with IC50 of < 50 .mu.M.
- L7 ANSWER 22 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:122976 CAPLUS
- DN 136:167181
- TI Preparation of biphenyl derivatives and their use as PPAR.gamma. receptor agonists
- IN Bernardon, Jean-Michel; Clary, Laurence
- PA Galderma Research & Development, Fr.
- SO PCT Int. Appl., 113 pp. CODEN: PIXXD2
- DT Patent
- LA French
- FAN. CNT 1

| r MIV • | PAT | ENT I | . OV | | KI | ND | DATE | | | A | PPLI | CATI | ON N | ο. | DATE | | | |
|---------|------|-----------|-------|-----|-----|-----|-------|------|-----|-----|------|----------|------|-----|------|------|-----|-----|
| PI | WO. | 2002 | 0122 | 10 | A | 1 | 2002 | 0214 | | W | 0 20 |
01-F | R254 | 3 | 2001 | 0803 | | |
| | | W: | | | | | | | | | | | | | BZ, | | | |
| | | | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KΡ, | KR, | ΚZ, | LC, | LK, | LR, |
| | | | | | | | | | | | | | | | NO, | | | |
| | | | | | | | | | | | | | | | TZ, | | ŪG, | US, |
| | | | | | | | | | | | | | | | ТJ, | | | |
| | | RW: | | | | | | | | | | | | | AT, | | | |
| | | | | | | | | | | | | | | | PT, | | | BF, |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | | | | | | SN, | • | TG | |
| | | | | | | | | | | | R 20 | 00-1 | 0447 | Α | 2000 | 8080 | | |
| | FR 2 | R 2812876 | | | A. | 1 : | 2002 | 0215 | | Fl | R 20 | 00-1 | 0447 | | 2000 | 8080 | | |
| | | 28128 | | | В: | 1 : | 2002 | 0927 | | | | | | | | | | |
| | AU : | 2001 | 08598 | 31 | A! | ō ; | 20020 | 0218 | | Α | J 20 | 01-8 | 5981 | | 2001 | 2803 | | |

FR 2000-10447 A 20000808

WO 2001-FR2543 W 20010803 EP 1309575 A1 20030514 EP 2001-965314 20010803 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR FR 2000-10447 A 20000808 WO 2001-FR2543 W 20010803 BR 2001013251 20030624 Α BR 2001-13251 20010803 FR 2000-10447 A 20000808 WO 2001-FR2543 W 20010803

OS MARPAT 136:167181 GI

$$\mathbb{R}^{2}$$
 \mathbb{R}^{3}
 \mathbb{R}^{2}
 \mathbb{R}^{1}
 \mathbb{R}^{3}

The invention concerns compds. I (e.g. N-[[4'-(2,4-dioxothiazolidin-5-ylmethyl)biphenyl-3-yl]methyl]-N-methylbenzamide) wherein: R1 represents a radical II or III; Y represents a CH2 radical or a S atom; R5 represents hydroxy, alkoxy, NH-OH, or N(R8)(R9) radical; and R6 represents alkyl, OR10, SR10, or (CH2)r-COR11. Said compds. are useful as PPAR.gamma. receptor activators in pharmaceutical compns. for use in human or veterinary medicine (in dermatol., as well as in the field of cardiovascular diseases, immune diseases and/or diseases related to lipid metab.), or in cosmetic compns. Agonist activity for 15 of the claimed compds. is reported. Although the methods of prepn. are not claimed, 82 example prepns. are included.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 23 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:104657 CAPLUS
- DN 136:151003
- TI Preparation of N-[(aryloxy)phenyl](thio)ureas and -carbamates as agrochemical fungicides
- IN Gerusz, Vincent; Mansfield, Darren James; Perez, Jose; Tickle, David;
 Vors, Jean-Pierre; Baldwin, Derek; Hough, Thomas; Mitchell, Dale Robert

<12/10/2003>

- PA Aventis Cropscience S.A., Fr.
- SO Eur. Pat. Appl., 42 pp.

Patel

CODEN: EPXXDW

DTPatent LΑ French FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE -----PΙ EP 1178039 A1 20020206 EP 2001-420173 20010801 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

FR 2000-10305 A 20000804 FR 2812633 A1 20020208 FR 2000-10305 20000804 JP 2002114751 JP 2001-238513 A2 20020416 20010806 FR 2000-10305 A 20000804 US 2003008884 A1 20030109 US 2001-923124 20010806 FR 2000-10305 A 20000804

OS MARPAT 136:151003

GI

AΒ R6ZZ1NRC(:X)R5 [I; R = H, alkyl, etc.; R5 = NR1R2, OR3, SR3; R1,R2 = H, alkyl, acyl, etc.; RR1, RR3, R1R2 = atoms to complete a ring; R3 = H, alkyl, etc.; R6 = 2-benzothienyl, 5-tert-butyl-1,3,4-oxadiazol-2-yl, substituted Ph, etc.; X = O or S; Z = bond, O, CO, SOO-2, NH, etc.; Z1 = e.g., 2,5-dimethyl-1,4-phenylene] were prepd. Thus, 2-chloro-1,4-xylene was nitrated and the product etherified by 3-(Me3C)C6H4OH to give, after redn., the phenoxyanilline which was treated with Cl2CS and the product amidated by HNMeEt to give title compd. II. Data for biol. activity of I were given.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 24 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN L7

AN 2002:51998 CAPLUS

DN 136:118448

TIPreparation of N-aryl-N'-arylethylurea derivatives as thrombin receptor antagonists

IN Barrow, James C.; Nantermet, Philippe G.; Selnick, Harold G.; Hutchinson, John H.; Breslin, Michael J.; Glass, Kristen L.; Connolly, Thomas M.; Stern, Andrew

PΑ Merck & Co., Inc., USA

SO U.S. Pat. Appl. Publ., 40 pp.

CODEN: USXXCO

DTPatent

LА English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

Patel

| ΡI | US 2002007045 | A1 | 20020117 | US | 2001-772353 | 20010130 |
|----------|-------------------|----|----------|----|---------------|----------|
| | US 6515023 | B2 | 20030204 | | | |
| | | | | US | 2000-179184PP | 20000131 |
| OS
GI | MARPAT 136:118448 | | | | | |

AΒ The title compds. [I; R1 = H, C1-10 alkyl; R2 = C1-10 alkyl, C3-8 cycloalkyl, CHMeCH2OMe, CHMeCH2F, CHMeCH2SMe; A = H, (CH2)m N(B)COR6 (wherein m = an integer of 0-5; B = H, R12, C3-8 cycloalkyl, CHMeCH2OMe, CHMeCH2F, CHMeCH2SMe; R6 = R13, Ar2, NHAr2, C3-8 cycloalkyl, CH2Ph, CMe2NCO2CMe3, C(NH2)Me2, OCMe3); A1, A2, A3, A4 = H, halo, NO2, cyano, R10, OR10, NR10R11; X = OH, OR4, O2CR4, O2CAr1, NR4Ar1, SR4, SOR4, SO2R4; wherein R4, R10, R12, R13 = H, C1-10 alkyl; Ar1, Ar2 = (un)substituted aryl or heteroaryl] and pharmaceutically acceptable salts thereof are prepd. These compds. can be used in a method of acting upon a thrombin receptor which comprises administering a therapeutically effective but non-toxic amt. of such compd. to a mammal, preferably a human. They are useful in inhibiting thrombin activation of the thrombin receptor, inhibiting the aggregation of blood platelets, treating thrombus formation or embolus formation, or preventing thrombus or embolus formation in a mammal (no data). Thus, to a soln. of 0.11 g triphosgene in 2 mL CH2Cl2 was added a soln. of 0.22 g tert-Bu 4-aminobenzylcarbamate, and 0.18 mL diisopropylethylamine in 10 mL CH2Cl2, dropwise over 15 min, followed by adding a soln. of 0.4 g 3-(4-aminomethylphenyl)-1-[2-(3,4-dichlorophenyl)-2-hydroxyethyl]-1-isopropylurea and 0.18 mL diisopropylethylamine in 5 mL CH2Cl2 over 5 min, and the resulting mixt. was stirred for 3 h to give, after workup and silica gel flash chromatog., 1-[(2S)-2-(3,4-Dichlorophenyl)-2-hydroxyethyl]-1-isopropyl-3-[4-[3-(4ureidomethylphenyl)ureidomethyl]phenyl]urea (II). A tablet and an i.v. formulation contg. II were prepd.

L7 ANSWER 25 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:10466 CAPLUS

DN 136:85809

TI Preparation of heteroarylphenyl substituted factor Xa inhibitors for treatment of thromboembolic disorders

IN Pinto, Donald J. P.; Quan, Mimi L.; Woerner, Francis J.

PA Dupont Pharmaceuticals Company, USA

SO PCT Int. Appl., 146 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

Patel

<12/10/2003>

| | PA' | rent i | NO. | | KI: | ND | DATE | | | A | PPLI | CATI | ON N | 0. | DATE | | | |
|----|-----|--------|------|------|-----|-----|-------|------|-----|-----|------|------|-------|-----|-------|------|-----|-----|
| ΡI | WO | 2002 | 0006 | 47 | A | 1 | 2002 | 0103 | | W | 0 20 | 01-U | s201 | 12 | 2001 | 0622 | | |
| | | W: | ΑE, | AG, | ΑL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, |
| | | | | | | | | | | | | | | | LK, | | | |
| | | | | | | | | | | | | | | | PL, | | - | |
| | | | - | | | | | | | | | | - | - | UG, | • | | |
| | | | ZA, | ZW, | AM, | AZ, | BY, | KG, | KZ, | MD, | RU, | ТJ, | TM | • | • | • | • | • |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, | CY, |
| | | | | | | | | | | | | | | | PT, | | | • |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | • | • |
| | | | • | , | • | | • | • | · | | | | | | 20000 | | | |
| | US | 2002 | 1032 | 02 | Α | 1 : | 20020 | 0801 | | U | S 20 | 01-8 | 8793 | 6 | 20010 | 0622 | | |
| | US | 6599 | 926 | | B. | 2 | 2003 | 0729 | | | | | | | | | | |
| | | | | | | | | | | U: | S 20 | 00-2 | 1403 | 3PP | 20000 | 0623 | | |
| | EΡ | 1296 | 977 | | A | 1 : | 2003 | 0402 | | E. | P 20 | 01-9 | 4669 | 8 | 20010 | 0622 | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | ΙE, | SI, | LT, | LV, | FΙ, | RO, | MK, | CY, | AL, | TR | · | | • | | • | • |
| | | | - | | · | | | | | U. | S 20 | 00-2 | 1403 | 3PP | 20000 | 0623 | | |
| | | | | | | | | | | Mo | 201 | 01-U | s201: | 12W | 20010 | 0622 | | |
| റട | MΔI | . העמכ | 136. | 8580 | a | | | | | | | | | | | | | |

OS MARPAT 136:85809

AB Title compds. I, II, and III [wherein ring D1 = pyridine, pyrazine, pyridazine, or pyrimidine substituted with 1 Ra and 0-1 Rb; ring D2 = 5-membered heteroarom. ring substituted with 1 Ra and 0-1 Rb; E = 0, 3S, or NRc; ring D3 = 5-membered heteroarom. ring substituted with 1 Ra and 0-1 Rb; R, Ra, and Rb = H, alkyl, halo, OH, alkoxy, CN, (un)substituted carboximidamido, (alkyl)amino, OCF3, etc.; Rc = H, alkyl, alkoxy, (un)substituted (alkyl)amino, OCF3, etc.; G = absent or (CH2)1-3, (CH2)0-2CO(CH2)0-2, (CH2)0-2O(CH2)0-2, (CH2)0-2NH(CH2)0-2, (CH2)0-2SOP(CH2)0-2, etc.; p = 0-2; G1 = (un)substituted (CH2)1-5, (CH2)0-2CH=CH(CH2)0-2, (CH2)0-2C.tplbond.C(CH2)0-2, (CH2)uCO(CH2)w, (CH2)uCO(CH2)w, (CH2)uCO(CH2)w, etc.; u + w = 0-4; G2 = Ph, naphthyl, or heteroaryl; M = isoxazoline, pyrazoline, isothiazoline,

triazoline tetrazoline, Ph, or substituted 5-6 membered heteroaryl; and pharmaceutically acceptable salts or prodrugs thereof] were prepd. as factor Xa inhibitors. For example, HCl gas was bubbled through 1-(3-cyanophenyl)-3-trifluoromethyl-5-[(2'-sulfonylmethyl-[1,1']-biphen-4-yl)aminocarbonyl]pyrazole in anhyd. EtOH to afford the ethoxyimidate intermediate. Addn. of N-methylmorpholine to the crude product in dioxane, followed by cyclization with semicarbazide.bul.HCl, gave the pyrazolamide IV. Some of the invention compds. inhibited factor Xa with Ki values of .ltoreq. 10 .mu.M. Thus, I are useful as anticoagulants for the treatment of thromboembolic disorders (no data).

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7 ANSWER 26 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:693283 CAPLUS
DN 135:257039
TI Preparation of polycyclic aryl and heteroaryl substituted benzenes useful for selective inhibition of the coagulation cascade
IN South, Michael S.; Parlow, John J.
PA Pharmacia Corporation, USA
```

SO PCT Int. Appl., 437 pp.

CODEN: PIXXD2

DT Patent LA English FAN.CNT 1

| | PATENT NO. | | | | KIND DATE | | | A | PPLI | CATI | 0. | DATE | | | | | | |
|----|------------|---------|-------|-----|-----------|------|----------|------|------|-----------------------|-------|-------|-------|-----|----------|------|-----|-----|
| PI | WO | 2001 | 0686 | 05 | A | 1 | 20010920 | | | WO 2001-US7918 200103 | | | | | | 0313 | | |
| | | W: | ΑE, | AG, | ΑL, | ΑM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN. |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, |
| | | | HR, | HU, | ID, | ΙL, | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | LS, |
| | | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | PL, | PT, | RO, |
| | | | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, |
| | | | VN, | YU, | ZA, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, | CY, |
| | | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | |
| | | | | | | | | | | U; | 3 20 | 00-1 | 88943 | 3PP | 20000 | 0313 | | |
| | | | | | | _ | | | | U. | 5 20 | 00-2 | 52159 | 9PP | 20001120 | | | |
| | US | 2002 | 02594 | 47 | A. | 1 | 20020 | 0228 | | U: | 3 20 | 01-80 | 04959 | 9 | 20010 | 0313 | | |
| | US | 6660885 | | B | 2 | 2003 | 1209 | | | | | | | | | | | |
| | | | | | | | | | | U. | 3 200 | 00-18 | 38943 | 3PP | 20000 | 313 | | |
| | | | | | | | | | | US | 3 200 | 00-2 | 52159 | PP | 20001 | L120 | | |

OS MARPAT 135:257039

GI

AB The title compds. [I; J = H, halo, OH, etc.; B = (un)substituted aryl, heteroaryl; A = a bond, CH2SO2, CH2, (CH2)2, etc.; Y = NH, O, CO, etc.; XO, R1, R2 = H, alkyl, halo, etc.; K = a bond, CH2, etc.; E0 = a bond, O, CONH, etc.; YO = (4-piperidinyl)methyl, (amidino)benzyl, etc.] and their pharmaceutically acceptable salts, useful as inhibitors of serine proteases of the coagulation cascade, were prepd. E.g., a multi-step synthesis of II.HCl which showed IC50 of > 30 .mu.M against factor VIIa, factor Xa and thrombin, and IC50 of 0.3 .mu.M against trypsin, was given.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 27 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:693247 CAPLUS
- DN 135:257156
- TI Preparation of sulfonamido substituted phenyl heteroaryl ureas as IL-8 receptor antagonists
- IN Widdowson, Katherine L.; Jin, Qi
- PA Smithkline Beecham Corporation, USA
- SO PCT Int. Appl., 44 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

| | PATENT NO. WO 200106856 WO 200106856 W: AE, CR, HU, LU, SD, YU, | | | | KI | ND | DATE | | | APPLICATION NO. DATE | | | | | | | | | |
|----|---|-----|-----|-----|--------|-----|----------------------|-----|-----|----------------------|-----|-----|------|----------|-----|-----|-----|-----|--|
| PI | | | | | A
A | _ | 20010920
20020321 | | | | | | 2001 | 20010309 | | | | | |
| | | w: | ΑE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH. | CN. | co. | |
| | | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH. | GM. | HR. | |
| | | | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR. | LS, | LT. | |
| | | | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | PL. | PT. | RO, | RU. | |
| | | | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | UG, | US. | UZ, | VN, | |
| | | | YU, | ZA, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | - | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | BE. | CH, | CY, | |
| | | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | ΙΤ, | LU, | MC, | NL, | PT. | SE. | TR. | BF, | |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | - • | |

| | AU | 2001045606 | A 5 | 20010924 | | US 2000-188410PP 20000310
AU 2001-45606 20010309
US 2000-188410PP 20000310 |
|----------|-----|--------------|------------|-----------|-----|--|
| | | | | | | WO 2001-US7746 W 20010309 |
| | EP | 1261336 | A2 | 20021204 | | EP 2001-918542 20010309 |
| | | R: AT, B | E, CH, DE | , DK, ES, | FR, | GB, GR, IT, LI, LU, NL, SE, MC, PT, |
| | | IE, S | [, LT, LV | , FI, RO, | MK, | CY, AL, TR |
| | | | | | | US 2000-188410PP 20000310 |
| | | | | | | WO 2001-US7746 W 20010309 |
| | JР | 2003535820 | Т2 | 20031202 | | JP 2001-567669 20010309 |
| | | | | | | US 2000-188410PP 20000310 |
| | | | | | | WO 2001-US7746 W 20010309 |
| | NO | 2002004193 | A | 20020903 | | NO 2002-4193 20020903 |
| | | | | | | US 2000-188410PP 20000310 |
| | | | | | | WO 2001-US7746 W 20010309 |
| | US | 2003055286 | A1 | 20030320 | | US 2002-220772 20020905 |
| | | 6608077 | B2 | 20030819 | | 05 2002 220112 20020903 |
| | | | DZ | 20000010 | | WO 2001-US7746 W 20010309 |
| OS
GI | MAI | RPAT 135:257 | 156 | | | MO 5001 021140 M 50010303 |

AB The title compds. [I; Rb = H, OH, aryl, etc.; m = 1-3; R1 = H, halo, NO2, etc.; Y = furyl, thiophenyl, pyridyl, etc.], useful in the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8), were prepd. Thus, reacting 3-amino-6-chloro-2-hydroxybenzenesulfonamide with 2-(azidocarbonyl)pyridine (prepns. given) in DMF afforded 62% I [Rb = H; Rl = 4-Cl; Y = 2-pyridyl]. The IL-8, and GRO-.alpha. chemokine effects of compds. I were detd. by in vitro assay (IC50 < 30 .mu.M).

L7 ANSWER 28 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Ι

AN 2001:672048 CAPLUS

DN 135:246996

TI Preparation of 2,5-Diamino-benzaldehyde-derivates and their usage in hair dyes

PA Wella A.-G., Germany

SO Ger. Gebrauchsmusterschrift, 38 pp.

CODEN: GGXXFR

DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|--------------------------------------|---------|
| | | | | | |
| PI | DE 20108608 | U1 | 20010913 | DE 2001-20108608
DE 2001-20108608 | |

OS MARPAT 135:246996

AB The invention concerns the synthesis of 2,5-Diamino-benzaldehyde-derivs.

Patel

and their usage in hair dye compns. as developers along with coupling agents and optionally direct dyes. Thus a hair dye contained (g): 1,4-diamino-2-(piperidine-1-yl-iminomethyl)-benzene 0.30; 3-methyl-4-aminophenol 0.30; 1-naphthol 0.30; 1,3-dihydroxy benzene 0.18; potassium oleate 10.0; ammonia (22% soln.) 10.0; ethanol 10; ascorbic acid 0.3; water to 100. Upon usage, 30 g of the compn. were mixed with 30 g 6% hydrogen peroxide soln.; after 30 min the dye was rinsed, the resulting color was reddish brown.

```
L7
     ANSWER 29 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     2001:661391 CAPLUS
DN
     135:210946
TI
     Preparation of pyridylamides as Factor Xa inhibitors.
IN
     Zhu, Bing-yan; Zhang, Penglie; Wang, Lingyan; Huang, Wenrong; Goldman,
     Erick; Li, Wenhao; Zuckett, Jingmei; Song, Yonghong; Scarborough, Robert
PA
     Cor Therapeutics, Inc., USA
SO
     PCT Int. Appl., 306 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 6
                     KIND DATE
     PATENT NO.
                                       APPLICATION NO. DATE
                     ____
                          -----
                                         PI
     WO 2001064642
                     A2
                          20010907
                                        WO 2001-US6247
                   A2 20020502
                                                         20010228
     WO 2001064642
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
            YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         US 2000-185746PP 20000229
                                         US 2000-663420 A 20000915
PATENT FAMILY INFORMATION:
FAN 2001:208239
    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
    -----
                                         ______
PΙ
    WO 2001019788
                    A2
                          20010322
                                        WO 2000-US25196 20000915
    WO 2001019788
                    A3
                          20010809
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                        US 1999-154332PP 19990917
                                         US 2000-185746PP 20000229
```

20020626

IE, SI, LT, LV, FI, RO, MK, CY, AL

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

A2

Patel

EP 1216228

EP 2000-963452 20000915

US 1999-154332PP 19990917

| | BR 2000014076 | A 20021015 | US 2000-185746PP 20000229 WO 2000-US25196W 20000915 BR 2000-14076 20000915 US 1999-154332PP 19990917 US 2000-185746PP 20000229 WO 2000-US25196W 20000915 |
|-----|--|---|--|
| | JP 2003509406 | T2 20030311 | US 2000-0323196W 20000915
US 1999-154332PP 19990917
US 2000-185746PP 20000229
WO 2000-US25196W 20000915 |
| | NO 2002001229 | A 20020521 | NO 2002-1229 20020312
US 1999-154332PP 19990917
US 2000-185746PP 20000229
WO 2000-US25196W 20000915 |
| FAN | 2001:208248 PATENT NO. | | APPLICATION NO. DATE |
| PI | WO 2001019798
WO 2001019798 | A2 20010322 | WO 2000-US25195 20000915 |
| | W: AE, AG,
CR, CU,
HU, ID,
LU, LV,
SD, SE, | AL, AM, AT, AU, ACZ, DE, DK, DM, DIL, IN, IS, JP, DMA, MD, MG, MK, DSG, SI, SK, SL, S | AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, KZ, MD, RU, TJ, TM |
| | RW: GH, GM,
DE, DK,
CF, CG, | KE, LS, MW, MZ, S
ES, FI, FR, GB, C
CI, CM, GA, GN, C | SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, GW, ML, MR, NE, SN, TD, TG |
| | R: AT, BE, | CH, DE, DK, ES, | EP 2000-963451 20000915
FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, |
| | 1E, S1, | LT, LV, FI, RO, I | MR, CY, AL
US 1999-154332PP 19990917
WO 2000-US25195W 20000915 |
| | BR 2000014078 | A 20021231 | BR 2000-14078 20000915
US 1999-154332PP 19990917
WO 2000-US25195W 20000915 |
| | JP 2003509412 | T2 20030311 | JP 2001-523378 20000915
US 1999-154332PP 19990917
WO 2000-US25195W 20000915 |
| | NO 2002001230 | A 20020521 | NO 2002-1230 20020312
US 1999-154332PP 19990917
WO 2000-US25195W 20000915 |
| FAN | 2001:661392
PATENT NO. | KIND DATE | APPLICATION NO. DATE |
| ΡI | WO 2001064643
WO 2001064643 | A2 20010907
A3 20020404 | WO 2001-US6255 20010228 |
| | W: AE, AG,
CR, CU,
HU, ID,
LU, LV,
SD, SE, | AL, AM, AT, AU, ACZ, DE, DK, DM, IL, IN, IS, JP, MA, MD, MG, MK, ISG, SI, SK, SL, | AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, KG, KZ, MD, RU, TJ, TM |
| | RW: GH, GM,
DE, DK, | KE, LS, MW, MZ, ES, FI, FR, GB, | SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, GN, GW, ML, MR, NE, SN, TD, TG |

| | | | | | US 2000-185746PP 20000229
US 2000-663420 A 20000915
EP 2001-918257 20010228 | | | | | | |
|-------|-----------------------------|--------|-----------|-----|---|--------------------|--|--|--|--|--|
| | | | | | GB, GR, IT, LI, LU, NL, SE, MC | , PT, | | | | | |
| | 1E, SI, | LT, LV | , F1, RO, | Mr. | CY, AL, TR
US 2000-185746PP 20000229 | | | | | | |
| | | | | | US 2000-163746FF 20000229
US 2000-663420 A 20000915 | | | | | | |
| | | | | | WO 2001-US6255 W 20010228 | | | | | | |
| FAN | 2002:11104 | | | | WO 2001 050255 W 20010220 | | | | | | |
| T.T.M | | KIND | DATE | | APPLICATION NO. DATE | | | | | | |
| PT | US 2002002183 | A1. | 20020103 | | US 2001-794225 20010228 | | | | | | |
| | US 6376515 | | | | | | | | | | |
| | | | | | US 2000-185746PP 20000229 | | | | | | |
| | | | | | US 2000-663420 A220000915 | | | | | | |
| | US 2003162690 | A1 | 20030828 | | US 2002-126976 20020422 | | | | | | |
| | | | | | US 2000-185746PP 20000229 | | | | | | |
| | | | | | US 2000-663420 A220000915 | | | | | | |
| | | | | | US 2001-794225 A120010228 | | | | | | |
| FAN | 2002:522631 | | | | | | | | | | |
| | PATENT NO. | KIND | DATE | | APPLICATION NO. DATE | | | | | | |
| PI | US 2002091116
US 6632815 | | | | US 2001-794214 20010228 | | | | | | |
| | | | | | US 1999-154332PP 19990917 | P 199909 17 | | | | | |
| | | | | | | | | | | | |
| | ****** 10F 0100 | | | | | | | | | | |

OS MARPAT 135:210946

AQDEGJX [A = alkyl, cycloalkyl, NR1R2, NR1R1C(:NR3), (substituted) Ph, AΒ naphthyl, mono- or bicyclic heterocyclyl, etc.; R1-R3 = H, alkyl, alkenyl, alkynyl, cycloalkyl, (alkyl)aryl, (alkyl)heteroaryl, etc.; R1R2 or R2R3 = atoms to form a 3-8 membered (substituted) (heterocyclic) ring; Q = bond, CH2, CO, O, NR7, etc.; R7 = H, alkyl, (alkyl)aryl, (alkyl)heteroaryl, etc.; D = bond, (substituted) Ph, naphthyl, mono- or bicyclic heterocyclyl; E = bond, alkyl, S, SO, SO2, alkoxy, etc.; G = (substituted) alkenyl, cycloalkenyl, phenylene, heterocyclyl, fused cyclic system; J = bond, NR9CO, O, S, SO, SO2, SO2NR9, CH2, NR9, etc.; R9 = H, alkyl, (alkyl)aryl, etc.; X = (substituted) Ph, naphthyl, heteroaryl, fused bicyclyl], were prepd. as antithrombotics (no data). Thus, N-(5-bromo-2-pyridinyl) 2-aminophenylcarboxamide (prepn. given), 4-[(2-tert-butylaminosulfonyl)phenyl]benzoyl chloride, and pyridine were stirred overnight in CH2Cl2 to give 85% N-(5-bromo-2-pyridinyl)-[2-4-[(2aminosulfonyl)phenyl]phenylcarbonylamino]phenylcarboxamide.

- L7 ANSWER 30 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:661241 CAPLUS
- DN 135:221308
- TI Use of PDGF receptor tyrosine kinase inhibitors for the treatment of diabetic nephropathy
- IN Atkins, Robert Charles; Chadban, Steven James; Cooper, Mark Emmanuel;
 Gilbert, Richard Ernest; Hill, Prudence Ann; Kelly, Darren James;
 Nikolic-Paterson, David John
- PA Novartis A.-G., Switz.; The University of Melbourne; Southern Health
- SO PCT Int. Appl., 26 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

```
Page 43
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     -----
                                          ______
PΙ
     WO 2001064200
                      A2
                           20010907
                                          WO 2001-EP2340 20010301
     WO 2001064200
                      A3
                           20020117
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          EP 2000-810181 A 20000303
     EP 1259242
                      A2
                           20021127
                                          EP 2001-921298
                                                         20010301
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          EP 2000-810181 A 20000303
                                          WO 2001-EP2340 W 20010301
     JP 2003525240
                      T2
                           20030826
                                          JP 2001-563097
                                                          20010301
                                          EP 2000-810181 A 20000303
                                          WO 2001-EP2340 W 20010301
     US 2003186977
                                          US 2003-220214
                      A1
                           20031002
                                                          20030415
                                          EP 2000-810181 A 20000303
                                          WO 2001-EP2340 W 20010301
OS
    MARPAT 135:221308
    The present invention relates to the use of PDGF receptor tyrosine kinase
AΒ
     inhibitors, esp. N-phenyl-2-pyrimidineamine derivs. for the treatment of
     diabetic nephropathy, glomerulonephritis, chronic pyelonephritis or IgA
    nephropathy. Thus, CGP 57148B administered in gum arabic as an oral
     suspension to rats, the left kidney of which was removed, was shown to
    inhibit the diorder.
L7
    ANSWER 31 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

- AN 2001:416931 CAPLUS
- DN 135:33495
- Arylamine derivatives and their use as anti-telomerase agent ΤI
- Mailliet, Patrick; Riou, Jean-Francois; Mergny, Jean-Louis; Laoui, IN Abdelazize; Lavelle, Francois; Petitgenet, Odile
- PΑ Aventis Pharma S.A., Fr.
- PCT Int. Appl., 66 pp. SO

CODEN: PIXXD2

- DT Patent
- LΑ French
- FAN.CNT 1

| | PATENT | NO. | | KI | ND | DATE | | | Α | PPLI | CATI | on n | 0. | DATE | | | |
|----|---------|-----|-----|-----|-----|------|-----|-----|-----|------|------|------|-----|------|-----|-----|-----|
| | | | | | | | | | _ | | | | | | | | |
| ΡI | WO 2001 | | | | | 2001 | | | | | | | | | | | |
| | W: | ΑE, | AG, | ΑL, | ΑM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN. |
| | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR. |
| | | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | KZ, | LC. | LK. | LR. | LS. | LT. |
| | | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NZ, | PL, | PT, | RO, | RU, |
| | | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | UG, | UZ, | VN, | YU, |
| | | ZA, | ZW, | ΑM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | | |
| | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, |
| | | DE, | DK, | ES, | FΙ, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT. | SE, | TR, | BF, |
| | | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | · | • |

| FR | 2801588
2801588 | A1
B1 | 20010601
20020301 | FR 1999-15031 A 19991129
FR 2000-10561 A 20000811
FR 1999-15031 19991129 |
|-----|--------------------|----------|----------------------|--|
| BR | 2000015992 | A | 20020806 | BR 2000-15992 20001127
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811
WO 2000-FR3310 W 20001127 |
| | 1244650
1244650 | A1
B1 | 20021002
20030625 | EP 2000-985339 20001127 |
| | R: AT, BE, | CH, DE | | GB, GR, IT, LI, LU, NL, SE, MC, PT, |
| | ,, | 22, 23. | , 11, 10, 111, | FR 1999-15031 A 19991129
FR 2000-10561 A 20000811
WO 2000-FR3310 W 20001127 |
| JP | 2003515604 | Т2 | 20030507 | JP 2001-541902 20001127
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811 |
| EE | 200200263 | A | 20030616 | WO 2000-FR3310 W 20001127
EE 2002-263 20001127
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811 |
| АТ | 243692 | E | 20030715 | WO 2000-FR3310 W 20001127
AT 2000-985339 20001127
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811 |
| US | 6645964 | В1 | 20031111 | WO 2000-FR3310 W 20001127
US 2000-722361 20001128
FR 1999-15031 A 19991129
US 2000-176632PP 20000119 |
| NO | 2002002528 | A | 20020528 | US 2000-218059PP 20000713
FR 2000-10561 A 20000811
NO 2002-2528 20020528
FR 1999-15031 A 19991129 |
| BG | 106753 | A | 20030228 | FR 2000-10561 A 20000811
WO 2000-FR3310 W 20001127
BG 2002-106753 20020529
FR 1999-15031 A 19991129
FR 2000-10561 A 20000811 |
| MAR | PAT 135:33495 | | | WO 2000-FR3310 W 20001127 |

OS

Nitrogen heterocycles, esp. diaminotriazines, were prepd. for use as telomerase inhibitors and anticancer agents. Thus, 2-amino-4,6-dichloro-AΒ 1,3,5-triazine was treated with 1-methyl-4,6-quinaldinium chloride hydrochloride to give 2-amino-4,6-bis(1-methyl-4-amino-6-quinaldinio)amino-1,3,5-triazine dichloride hydrochloride which was converted to its free base. The free base had a telomerase-inhibiting IC50 of 0.25 .mu.M and a cytotoxic IC50 of 0.59-1.9 .mu.M.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 32 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- 2001:265376 CAPLUS AN
- DN 134:295625
- Preparation of novel diarylamide derivatives and use thereof as remedies TIof abnormal propagation of vascular smooth muscle cells
- IN Ogita, Haruhisa; Isobe, Yoshiaki; Takaku, Haruo

PA Japan Energy Corporation, Japan

PCT Int. Appl., 196 pp. SO

CODEN: PIXXD2

DT Patent

Japanese LA

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. PΙ WO 2001025190 A1 20010412 WO 2000-JP6667 20000927

W: AU, CA, JP, NZ, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

JP 1999-281271 A 19991001 JP 1999-290789 A 19991013

AU 2000074466 A5 20010510 AU 2000-74466 20000927 JP 1999-281271 A 19991001

JP 1999-290789 A 19991013 WO 2000-JP6667 W 20000927

20020807 EP 1229010 A1 EP 2000-962891 20000927 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

Ι

JP 1999-281271 A 19991001 JP 1999-290789 A 19991013 WO 2000-JP6667 W 20000927

MARPAT 134:295625 OS

GΙ

AΒ Title compds. [I; wherein A and B are each an arom. ring such as benzene ring; COY and NHCOX are adjacent to each other and bonded to carbon atoms constituting A; X is alkylene, alkyleneoxy, or a single bond; Y is alkyl, alkoxy, hydroxyl, or optionally substituted amino; Rl is hydrogen, halogeno, hydroxyl, alkyl, or the like, with the proviso that when A is a

Patel

II

benzene ring, R1 is not hydrogen; R2 is hydrogen, halo, hydroxyl, alkyl; R3 and R4 are each optionally substituted imino, oxygen, or a single bond; R5 is alkyl, optionally substituted Ph, etc.; Z is oxygen or sulfur] and pharmaceutical compns. contg. the derivs. or salts as the active ingredient for prevention or treatment of diseases caused by abnormal propagation of vascular smooth muscle cells. Thus, the title compd. II was prepd. and tested.

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7 ANSWER 33 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2000:513673 CAPLUS

DN 133:135235

TI Preparation and anti-tumor, anti-atherosclerosis, anti-psoriasis, anti-diabetes, and anti-arthritis activities of quinolines and quinazolines

IN Kubo, Kazuo; Fujiwara, Yasunari; Isoe, Toshiyuki

PA Kirin Beer Kabushiki Kaisha, Japan

SO PCT Int. Appl., 208 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

| | PA' | PATENT NO. KIND DATE | | | | | | | APPLICATION NO. DATE | | | | | | | | | |
|------------|-----|----------------------|------|-----|-----|-----|-------|------|----------------------|------|-------|-------|-------|------|-------|------|-----|-----|
| PI | WO | 2000 | | | A | 1 | 2000 | 0727 | | W | 0 20 | 00-J | P255 | | | | | |
| | | W: | ΑE, | ΑL, | AM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, | CU, |
| | | | CZ, | DE, | DK, | DM, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID. | IL. |
| C <i>I</i> | | | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV. | MA. |
| | | | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NZ, | PL, | PT, | RO. | RU. | SD, | SE. | SG. | SI. |
| | | | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZW. | AM. |
| | | | AZ, | BY, | KG, | KZ, | MD, | RU, | ТJ, | TM | • | | • | • | • | • | | |
| | | RW: | | | | | | | | | TZ. | UG, | ZW. | AT. | BE, | CH. | CY. | DE. |
| | | | | | | | | | | | | | | | SE, | | | |
| | | | | | | | GN, | | | | | | | | | , | , | , |
| | | | | | | • | | • | • | - | - | | | | 1999 | 0122 | | |
| | | | | | | | | | | J | P 19 | 99-2 | 6691 | Α | 1999 | 0203 | | |
| | | | | | | | | | | J | P 19 | 99-1 | 4249 | 3 A | 1999 | 0521 | | |
| | | | | | | | | | | J. | P 19 | 99-2 | 5362 | 4 A | 1999 | 0907 | | |
| (| CA | CA 2361057 | | | | Ą | 2000 | 0727 | | C | A 20 | 00-2 | 3610 | 57 | 2000 | 0120 | | |
| | | | | | | | | | | J. | P 19 | 99-1 | 4858 | Α | 1999 | 0122 | | |
| | | | | | | | | | | J. | P 19 | 99-2 | 6691 | Α | 1999 | 0203 | | |
| | | | | | | | | | | J. | P 19 | 99-1 | 4249 | 3 A | 1999 | 0521 | | |
| | | | | | | | | | J. | P 19 | 99-2 | 5362 | 4 A | 1999 | 0907 | | | |
| | | | | | | | | | | W | 20 | 00-J | P255 | W | 2000 | 0120 | | |
| | BR | 2000 | 0076 | 56 | Α | | 2001 | 1030 | | B | R 20 | 00-7 | 656 | | 2000 | 0120 | | |
| | | | | | | | | | | J: | P 19: | 99-1 | 4858 | Α | 1999 | 0122 | | |
| | | | | | | | | | | J) | P 19 | 99-2 | 6691 | Α | 1999 | 0203 | | |
| | | | | | | | | | | J | P 19 | 99-1 | 42493 | 3 A | 1999 | 0521 | | |
| | | | | | | | | | | J) | P 19 | 99-2 | 53624 | 4 A | 19990 | 0907 | | |
| | | | | | | | | | | W | 200 | 00-J | P255 | W | 2000 | 0120 | | |
| | EP | 1153 | 920 | | A | L. | 2001: | 1114 | | E | P 20 | 00-90 | 0084 | 1 | 20000 | 0120 | | |
| | EP | 1153 | 920 | | B | L. | 2003 | 1029 | | | | | | | | | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | ΙE, | SI, | LT, | LV, | FI, | RO | | | | | | - | , | | • | |
| | | | | | | | | | | J | 2 199 | 99-14 | 4858 | Α | 19990 | 122 | | |
| | | | | | | | | | | | - 10 | 20 0 | | _ | | | | |

JP 1999-26691 A 19990203

| | | | JP | 1999-142493 | A | 19990521 |
|-------------------|----|----------|----|-------------|----|-----------|
| | | | JΡ | 1999-253624 | Α | 19990907 |
| | | | WO | 2000-JP255 | W | 20000120 |
| JP 2003286263 | A2 | 20031010 | JP | 2003-128216 | | 20000120 |
| | | | JР | 1999-14858 | Α | 19990122 |
| | | | JP | 1999-26691 | Α | 19990203 |
| | | | JΡ | 1999-142493 | Α | 19990521 |
| | | | JΡ | 1999-253624 | A | 19990907 |
| | | | JΡ | 2000-594782 | A. | 320000120 |
| NO 2001002617 | A | 20010914 | NO | 2001-2617 | | 20010529 |
| | | | JΡ | 1999-14858 | Α | 19990122 |
| | | | JΡ | 1999-26691 | Α | 19990203 |
| | | | JΡ | 1999-142493 | Α | 19990521 |
| | | | JP | 1999-253624 | Α | 19990907 |
| | | | WO | 2000-JP255 | W | 20000120 |
| MADDAT 122.125225 | | | | | | |

OS MARPAT 133:135235

GΙ

AΒ Title compds. [I; X and Z represent each CH or N; R1-3 represent each H, optionally substituted alkoxy, etc.; R4 represents H; R5-8 represent each H, halogeno, alkyl, alkoxy, alkylthio, nitro or amino, provided that all of R5-8 do not represent H simultaneously; R9 and R10 represent each H, alkyl or alkylcarbonyl; and R11 represents alkyl, alkenyl, alkynyl or aralkyl], pharmaceutically acceptable salts and solvates, and medicinal compns. contg. the same are prepd. and tested having antitumor activity and causing no morphol. change in cells. Thus, the title compd. I (X =CH; Z = CH; R1, R4, R5, R7-R10 each an H; R11 = 3, 5-F2C6H3) was prepd. and tested.

Ι

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 34 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
L7
```

2000:457050 CAPLUS ΑN

DN 133:79374

Aromatic heterocyclic compounds as thrombin or factor Xa inhibitors IT

Lam, Patrick Yuk Sun; Clark, Charles G.; Li, Hui Yin; Pinto, Donald J. P.

PΑ Du Pont Pharmaceuticals Co., USA

PCT Int. Appl., 121 pp. SO

CODEN: PIXXD2 DTPatent

English LΑ

FAN.CNT 3

Patel

<12/10/2003>

| | PATENT NO. | | | | | DATE | | | A | PPLI | CATI | ON N | ο. | DATE | E | | | |
|----|----------------|---|--|--------------------------------|---------------------------|------------------------------------|--|---|------------|---|---|--|---|--|---|---|------------|-------|
| PI | WO | 2000
W: | | 80 | Α | .1 | | 0706 | | W | 0 19 | | | | | | | MV |
| | | | NO, | NZ,
RU, | PL, | RO, | SG, | SI, | SK, | TR, | UA, | VN, | ZA, | AM, | AZ, | BY, | мк,
КG, | KZ, |
| | | RW: | AT,
PT, | BE,
SE | CH, | CY, | DE, | DK, | ES, | | | | | | | | MC, | NL, |
| | EP | 1140 | 871 | | А | .1 | 2001 | 1010 | | U:
El | 5 19
P 19 | 98-1:
99-9: | 1362'
6748! | 7PP
5 | 1998
1999 | 1223
1222 | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | | | | | | | | | | 98-1:
99-U; | | | | | | |
| | បន | 6369 | 227 | | В | 1 | 2002 | 0409 | | US | 3 19 | 99-40
98-1: | 69830 |) | 1999 | 1222 | | |
| | US | 6403 | 583 | | В | 1 | 2002 | 0611 | | US | 19 | 99-46
98-1 | 6983 | 5 | 1999 | 1222 | | |
| | JP | 2002 | 53722 | 27 | T. | 2 | 2002 | 1105 | | JI | 20 | 00-59 | 91019 | € | 1999 | 1222 | | |
| | | | | | | | | | | WC | 19 | 98-1:
99-u: | 33051 | L2W | 1999 | 1222 | | |
| | | 20023
66028 | | 54 | | | 20020 | | | US | 3 20 | 01-71 | 195 | | 2001 | 1204 | | |
| | | | | | | | | | | | | 98-11
99-46 | | | | | | |
| | | 65008
20030 | 855
00434 | 44 | B:
A: | 1
1 | 20023 | 1231 | | | | 02-33 | | | | | | |
| | | | | | | | | | | | | 98-11
99-46 | | | | | | |
| | | FAMILY
00:456 | | FORM | ATIO | N: | | | | | | | | | 1000 | | | |
| | | ENT N | | | KII | | DATE | | | AF | | CATIO | |). | DATE | | | |
| PI | WO | 20000 | | | | | 20000 | | | WC | 199 | 99~US | 3073 | 7 | 1999 | 1221 | T | ~ ~ ~ |
| | | ٧٠. | MΑ, | MK. | MX, | NO. | CIV, | DI | C4, | | | пo, | TL, | TN, | UP, | KK, | ZA. | AM, |
| | | DW. | ΑZ, | BY, | KG, | KZ. | NZ,
MD. | RU. | RO, | DM,
SG,
TM | SI, | SK, | TR, | 14, | UA, | VN, | | |
| | | RW: | | BY,
BE, | KG, | KZ, | MD,
DE, | RU, | ТJ, | SG,
TM | SI, | | | | | | • | NL, |
| | CA | | AT,
PT, | BY,
BE,
SE | KG,
CH, | KZ,
CY, | MD,
DE, | RU,
DK, | ТJ, | SG,
TM
FI, | SI,
FR, | GB,
98-11 | GR,
.3627 | IE, | IT,
1998: | LU, | • | NL, |
| | CA | 23207 | AT,
PT, | BY,
BE,
SE | KG,
CH, | KZ,
CY, | MD,
DE, | RU,
DK, | ТJ, | SG,
TM
FI,
US
CA | FR,
199
199 | GB,
98-11
99-23
98-11 | GR,
13627
32073
13627 | IE,
PP 0 | IT,
1998:
1999: | LU,
1223
1221
1223 | • | NL, |
| | | 23207
10585 | AT,
PT,
730 | BY,
BE,
SE | KG,
CH,
AZ | KZ,
CY, | MD,
DE,
20000 | RU,
DK,
0706 | TJ,
ES, | SG,
TM
FI,
US
CA
US
WC
EP | FR,
199
199
199 | GB,
98-11
99-23
98-11
99-US | GR,
13627
32073
3627
3073 | PP O PP 7W | IT,
1998:
1999:
1998:
1999: | LU,
1223
1221
1223
1221
1221 | MC, | |
| | | 23207
10585 | AT,
PT,
730
549
AT, | BY,
BE,
SE | KG,
CH,
AZ
CH, | KZ,
CY, | MD,
DE, | RU,
DK,
0706 | TJ,
ES, | SG,
TM
FI,
US
CA
US
WC
EP
GB, | FR,
199
199
199
199
GR, | GB,
98-11
99-23
98-11
99-US
99-96 | GR,
3627
32073
3627
33073
57554 | PP 0 PP 7W | IT,
1998:
1999:
1998:
1999:
NL, | LU,
1223
1221
1223
1221
1221
SE, | MC, | |
| | EP | 23207
10585
R: | AT,
PT,
730
549
AT,
IE, | BY,
BE,
SE | KG,
CH,
AZ
CH, | KZ,
CY, | MD,
DE,
20000
20001
DK, | RU,
DK,
0706 | TJ,
ES, | SG,
TM
FI,
US
CA
US
WC
EP
GB, | FR,
199
199
199
GR, | GB,
98-11
99-23
98-11
99-US
1T,
98-11 | GR,
3627
32073
3627
3073
57554
LI,
3627 | PP 7W LU, | IT,
1998:
1999:
1998:
1999:
NL, | LU,
1223
1221
1223
1221
1221
SE, | MC, | |
| | EP | 23207
10585 | AT,
PT,
730
549
AT,
IE, | BY,
BE,
SE | KG,
CH,
AZ
CH, | KZ,
CY,
A
L
DE,
LV, | MD,
DE,
20000
20001
DK, | RU,
DK,
0706
.213
ES,
RO | TJ,
ES, | SG,
TM
FI,
US
CA
US
WC
EP
GB,
US | FR,
199
199
199
GR,
199 | GB,
98-11
99-23
98-11
99-08
IT,
98-11
99-08 | GR,
3627
32073
3627
3073
57554
LI,
3627
3073 | PP O DP COMPANY COMPAN | IT,
1998:
1999:
1999:
NL,
1998:
1999: | LU, 1223 1221 1223 1221 5E, 1223 1221 1222 | MC, | |
| | EP | 23207
10585
R: | AT,
PT,
730
549
AT,
IE, | BY,
BE,
SE | AZ
CH,
LT, | KZ,
CY,
A
DE,
LV, | MD,
DE,
20000
20001
DK,
FI, | RU,
DK,
0706
.213
ES,
RO | TJ,
ES, | SG,
TM
FI,
US
CA
US
WC
EP
GB,
US
WO
US
US
US | FR,
199
199
199
199
199
199 | GB,
98-11
99-23
99-05
99-96
IT,
98-11
99-46
98-11 | GR,
3627
32073
3627
37554
LI,
3627
3073
59830
3627 | PP 7W LU, | IT,
1998;
1998;
1999;
1999;
NL,
1998;
1999;
1999; | LU, 1223 1221 1223 1221 5E, 1223 1221 1222 1223 1222 | MC, | |
| | EP
US
US | 23207
10585
R:
63692
64035
20021 | AT,
PT,
730
549
AT,
IE,
227
583 | BY,
BE,
SE
BE,
SI, | AG, CH, AG, CH, LT, B1 B1 | KZ,
CY,
L
DE,
LV, | MD, DE, 20000 20001 DK, FI, 20020 20000 200000 20000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 | RU, DK, 0706 2213 ES, RO 0409 0611 | TJ,
ES, | SG,
TM
FI,
US
CA
US
EP
GB,
US
US
US
US
US | FR,
199
199
199
199
199
199
199 | GB,
98-11
99-23
99-05
99-96
IT,
98-11
99-05
99-46 | GR,
3627
32073
3627
33073
57554
LI,
3627
39830
3627
59835
3627 | PP O PP TW LU, PP TW PP | IT,
1998;
1998;
1999;
1999;
NL,
1998;
1999;
1999; | LU, 1223 1221 1223 1221 5E, 1223 1222 1223 1222 | MC, | |
| | EP
US
US | 23207
10585
R:
63692
64035 | AT,
PT,
730
549
AT,
IE,
227
583 | BY,
BE,
SE
BE,
SI, | AG, CH, AG, CH, LT, B1 | KZ,
CY,
L
DE,
LV, | MD, DE, 20000 | RU, DK, 0706 2213 ES, RO 0409 0611 | TJ,
ES, | SG, TM FI, US CA US WC EP GB, US US US US US US US | FR,
199
199
199
199
199
199
199
200 | GB,
98-11
99-23
98-11
99-96
IT,
98-11
99-46
98-11
99-46 | GR,
3627
32073
3627
33073
57554
LI,
3627
3830
3627
9835
3627
95 | IE, PP 0 PP 1 TW 1 LU, PP 1 PP 2 | IT,
1998;
1999;
1999;
NL,
1998;
1999;
1998;
1998;
1998;
1998; | LU, 1223 1221 1223 1221 5E, 1223 1222 1223 1222 1223 1222 | MC, | |

| 099: | 51006.2 3 | Page 49 | |
|----------|--------------------------------------|---|----|
| | US 2003004344 | | |
| | | US 1998-113627PP 19981223
US 1999-469830 A319991222 | |
| FAN | 2000:457044
PATENT NO. | KIND DATE APPLICATION NO. DATE | |
| PI | WO 2000039102 | A1 20000706 WO 1999-US30735 19991221 | |
| | W: AL, AU, | BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX. | |
| | NO, NZ, | PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, TJ, TM | |
| | | CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, | |
| | , | US 1998-113627PP 19981223 | |
| | EP 1140862
R: AT. BE. | A1 20011010 EP 1999-965337 19991221
CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | |
| | IE, SI, | LT, LV, FI, RO | |
| | | US 1998-113627PP 19981223
WO 1999-US30735W 19991221 | |
| | US 6369227 | B1 20020409 US 1999-469830 19991222 | |
| | US 6403583 | US 1998-113627PP 19981223
B1 20020611 US 1999-469835 19991222 | |
| | 05 0405505 | B1 20020611 US 1999-469835 19991222
US 1998-113627PP 19981223 | |
| | US 2002115854
US 6602871 | A1 20020822 US 2001-7195 20011204
B2 20030805 | |
| | 05 0002071 | US 1998-113627PP 19981223 | |
| | US 6500855 | US 1999-469831 B119991222 | |
| | US 2003004344 | B1 20021231 US 2002-33137 20020102
A1 20030102 | |
| | | US 1998-113627PP 19981223 | |
| os | MARPAT 133:79374 | | |
| AB | This invention | relates generally to inhibitors of trypsin-like serine s, esp. factor Xa or thrombin, pharmaceutical compns. | |
| | contg. the same, | , and methods of using the same as anticoagulant agents for | or |
| | treatment and pr | revention of thromboembolic disorders. | |
| ь7 | ANSWER 35 OF 65 | CAPLUS COPYRIGHT 2003 ACS on STN | |
| AN
DN | 2000:368323 CAI
133:17481 | PLUS | |
| TI | Preparation of 1 | IL-5 inhibiting 6-azauracil derivatives | |
| IN | Lacrampe, Jean H | Fernand Armand; Ligny, Yannick; Freyne, Eddy Jean Edgard; | |
| PA | Deroose, Frederi
Janssen Pharmace | eutica N.V., Belg. | |
| SO | PCT Int. Appl., | | |
| DT | CODEN: PIXXD2 Patent | | |
| LA | English | | |
| rAM. | CNT 1
PATENT NO. | KIND DATE APPLICATION NO. DATE | |
| DΥ | | | |
| PΙ | WO 2000031053
W: AE, AL, | A1 20000602 WO 1999-EP9154 19991122
AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, | |
| | CZ, DE, | DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, | |
| | IN, IS,
MD, MG. | JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, | |
| | SK, SL, | TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, | |
| | AZ, BY, | KG, KZ, MD, RU, TJ, TM | |

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 1998-203929 A 19981123 20010919 EP 1999-963332 EP 1133483 A1 20030423 EP 1133483 В1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO EP 1998-203929 A 19981123 WO 1999-EP9154 W 19991122 JP 2002530390 T2 20020917 JP 2000-583881 19991122 EP 1998-203929 A 19981123 WO 1999-EP9154 W 19991122 AU 2000-19677 AU 759405 B2 20030417 19991122 EP 1998-203929 A 19981123 WO 1999-EP9154 W 19991122 AT 238287 20030515 AT 1999-963332 19991122 EP 1998-203929 A 19981123 WO 1999-EP9154 W 19991122 US 6498158 B1 20021224 US 2001-856626 20010522 EP 1998-203929 A 19981123 WO 1999-EP9154 W 19991122

OS MARPAT 133:17481 GI

$$\begin{bmatrix} R^4 \\ q \end{bmatrix}$$

$$\begin{bmatrix} R^1 \\ p \end{bmatrix}$$

AB The title compds. [I; p = 0-3; q = 0-4; AB = (CH2)r, (CH2)tO, (CH2)tS(O)u, (CH2)tNR3; r = 2-4; t = 1-3; u = 0-2; X1 = O, S, NR3, a direct bond; R1, R4 = alkyl, halo, polyhaloalkyl, etc.; R2 = aryl, heteroaryl, cycloalkyl, etc.; R3 = H, alkyl], useful in treating eosinophil-dependent inflammatory diseases, were prepd. and formulated. E.g., a multi-step synthesis of

azauracil II which showed 70.5% inhibition of IL-5 prodn. at 1x10-6 M, was given.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7 ANSWER 36 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2000:241203 CAPLUS

DN 132:265207

TI Preparation of 4-anilinoquinazolines and 4-anilinoquinolines as inhibitors of cytokine mediated disease

IN Cumming, John Graham

PA Zeneca Limited, UK

SO PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PA: | rent : | NO. | | KI | | | | | A | PPLI | CATI | ON NO | ο. | DATE | | | |
|---|--------|--------------|------|-----|----------|-----|--------------|------|----------------------|-----|-------|----------|-------|-----|-------|----------|-----|-----|
| [| WO | 2000 | 0204 | 02 | | | | 0413 | | W | 0 19 |
99-G | B322 | 0 | 1999 |
0927 | | |
| | | W: | ΑE, | ΑL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, | CU, |
| | | | CZ, | DE, | DK, | DM, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, |
| | | | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, |
| | | | | | | | | | | | | | | | SE, | | | |
| | | | SL, | ΤJ, | TM, | TR, | TT, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZW, | AM, | ΑZ, | BY, |
| | | | | • | MD, | • | | | | | | | | | | | | |
| | | RW: | • | • | • | | • | • | | | - | - | | - | BE, | | | |
| | | | DK, | ES, | FΙ, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, |
| | | | CG, | CI, | CM, | GA, | GN, | GW, | $\mathtt{ML}_{m{r}}$ | | | | TD, | | | | | |
| | | | | | | | | | | | | | | | 1998: | | | |
| | | | | | | | | | | | | | | | 1999 | | | |
| | CA | 2341 | 374 | | A | A | 2000 | 0413 | | | | | | | 1999 | | | |
| | | | | | | | | | | | | | | | 1998 | | | |
| | | | | | | | | | | | | | | | 1999 | | | |
| | 70 7 7 | 0061 | 064 | | 70. | 1 | 2000 | 0406 | | | U 19 | | | | 19990 | | | |
| | | 9961
7615 | | | A:
B: | T | 2000
2003 | 0426 | | Α | 0 19 | 99-0 | 1004 | | 1999 | J 3 Z 1 | | |
| | AU | /613 | 32 | | D | ۷. | 2003 | 0003 | | C. | B 10 | 98-2 | 1338 | 7 | 1998: | 1001 | | |
| | | | | | | | | | | | | | 564 | | 19990 | | | |
| | | | | | | | | | | | | | | | 1999 | | | |
| | BR | 9914 | 162 | | А | | 2001 | 0626 | | | | | | | 1999 | | | |
| | | | | | | | | | | | | | | | 1998: | 1001 | | |
| | | | | | | | | | | G: | B 19 | 99-6 | 564 | Α | 1999 | 0323 | | |
| | | | | | | | | | | W | 0 19 | 99-G | B322 | W C | 1999 | 0927 | | |
| | ΕP | 1117 | 653 | | A | 1 | 2001 | 0725 | | E | P 19 | 99-9 | 4768 | 6 | 1999 | 0927 | | |
| | EP | 1117 | 653 | | B | 1 | 2003 | 0205 | | | | | | | | | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | IE, | SI, | LT, | LV, | FI, | RO | | | | | | | | | | |
| | | | | | | | | | | | | | | | 1998 | | | |
| | | | | | | | | | | | | | 564 | | 1999 | | | |
| | | | | | | | | | | | | | | | 1999 | | | |
| | JP | 2002 | 5265 | 38 | T | 2 | 2002 | 0820 | | | | | | | 19990 | | | |
| | | | | | | | | | | | | | | | 1998 | | | |
| | | | | | | | | | | | | _ | 564 | | 1999 | | | |
| | | 0000 | 20 | | _ | | 0000 | 0015 | | | | | | | 19990 | | | |
| | ΑΊ | 2322 | 05 | | E | | 2003 | 0215 | | | | | 4768 | | 1999 | | | |
| | | | | | | | | | | G. | p 19: | 98-2 | T338 | Α | 1998 | TOOT | | |

| | | | | an | 1000 6564 | 71 | 10000000 |
|----|------------|----|----------|----|-------------|----|-----------|
| | | | | GB | | | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| ΝZ | 510210 | A | 20030630 | NZ | 1999-510210 | | 19990927 |
| | | | | GΒ | 1998-21338 | A | 19981001 |
| | | | | GΒ | 1999-6564 | A | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| ES | 2191462 | Т3 | 20030901 | ES | 1999-947686 | | 19990927 |
| | | | | GΒ | 1998-21338 | Α | 19981001 |
| | | | | GΒ | 1999-6564 | Α | 19990323 |
| ZA | 2001002187 | A | 20020618 | zΑ | 2001~2187 | | 20010315 |
| | | | | GΒ | 1998-21338 | Α | 19981001 |
| บร | 6593333 | В1 | 20030715 | US | 2001-787883 | | 20010323 |
| | | | | GB | 1998-21338 | Α | 19981001 |
| | | | | GB | 1999-6564 | Α | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| NO | 2001001631 | Α | 20010521 | NO | 2001-1631 | | 20010330 |
| | | | | GB | 1998-21338 | Α | 19981001 |
| | | | | GB | 1999-6564 | Α | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| US | 2003216417 | A1 | 20031120 | US | 2003-441084 | | 20030520 |
| | | | | GB | 1998-21338 | Α | 19981001 |
| | | | | GB | 1999-6564 | Α | 19990323 |
| | | | | WO | 1999-GB3220 | W | 19990927 |
| | | | | US | 2001-787883 | A3 | 320010323 |
| | 100 065000 | | | | | | |

I

II

OS MARPAT 132:265207

$$\begin{bmatrix} \mathbb{R}^2 \\ \mathbb{R}^3 \\ \mathbb{R}^5 \end{bmatrix}_{\mathbb{R}}^{\mathbb{R}^3}$$

AB The title compds. [I; G = N, CH; R1 = OH, halo, CF3, etc.; R2, R3 = H, halo, alkyl, etc.; R4 = H, OH, alkyl, etc.; R5 = H, halo, CF3; m = 1-3; q = 0-4] and their pharmaceutically acceptable salts or in vivo cleavable esters, useful in the treatment of diseases or medical conditions mediated by cytokines, were prepd. and formulated. E.g., a multi-step synthesis of II which showed IC50 of 0.2 .mu.M against p38.alpha. kinase and IC50 of 5.2 .mu.M against TNF.alpha. prodn., was given.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7 ANSWER 37 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2000:227634 CAPLUS

DN 132:265091

TI Preparation of N-(benzamidophenyl)pyridinecarboxamides and analogs as cytokine production inhibitors

IN Brown, Dearg Sutherland; Brown, George Robert

PA Zeneca Limited, UK

SO PCT Int. Appl., 138 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PΙ

| PA! | CENT I | NO. | | KII | ND
 | DATE | | | A | PPLI | CATI | ON NO | 0. | DATE | | | |
|--------|----------|------------|-----|------|--------|----------------|------|-----|-----|-------|---|-------------------------------|--------|----------------|--------|------|-----|
| WO | 2000 | 0187 | 38 | A. | 1 | 2000 | 0406 | | W | 0 19 |
99-G | B314 | 4 | 1999 | 0921 | | |
| | W: | ΑE, | ΑL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, | CU, |
| | | | | | | | | | | | | | | HR, | | | |
| | | | | | | | | | | | | | | LT, | | | |
| | | MG, | MK, | MN, | MW, | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, |
| | | SL, | ТJ, | TM, | TR, | TT, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZW, | AM, | AZ, | BY, |
| | | | - | • | | ТJ, | | | | | | | | | | | |
| | R₩: | | | | | | | | | | | | | BE, | | | |
| | | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, |
| | | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | | | | | | | | | |
| | | | | | | | | | | | | | | 1998 | | | |
| | | | | | | | | | | | | | | 1998 | | | |
| ~~ | 0040 | | | | _ | | | | | | | | | 1999 | | | |
| CA | 23404 | 454 | | ΑA | 4 | 2000 | 0406 | | | | | | | 1999 | | | |
| | | | | | | | | | | | | | | 1998 | | | |
| | | | | | | | | | | | | | | 1998: | | | |
| | | | | | | | | | | | | | | 19990 | | | |
| א דד ת | 99610 | 124 | | 70.7 | | 2000 | 0417 | | | | | | | 19990 | | | |
| | 76136 | | | B2 | | 2000)
2003) | | | A | 1 19: | 99-6 | 1034 | | 19990 | 3921 | | |
| AU | 10136 |) <u>T</u> | | DZ | ٤. | 2003 | 2003 | | CI | 100 | 00 2/ | 2770 | 70 | 1000 | 2005 | | |
| | | | | | | | | | | | 98-20
98-20 | | | 19980 | | | |
| | | | | | | | | | | | 99-59 | | | 19983 | | | |
| | | | | | | | | | | | | | | 19990
19990 | | | |
| RR | 99139 | 347 | | Z | | 2001 | 1612 | | | | 99-G | | | 19990 | | | |
| | JJ 1 J 1 | 711 | | 11 | • | 2001 | 7012 | | | | 98-20 | | | 19980 | | | |
| | | | | | | | | | | | 98-26 | | | 19981 | | | |
| | | | | | | | | | | | 99-59 | | | 19990 | | | |
| | | | | | | | | | | | | | | 19990 | | | |
| EΡ | 11157 | 707 | | A1 | | 20010 | 7718 | | | | 99-94 | | | 19990 | | | |
| | 11157 | | | В1 | | 2003 | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | .,000 | • | 1000 | ,,,,,, | | |
| | R: | | BE. | | | | | FR. | GB. | GR. | TT. | T ₁ T ₋ | T.II - | NL, | SE. | MC. | PΨ. |
| | | | | | | FI, | | / | , | , | / | , | · , | 1111, | 54, | -10, | , |

GΙ

| | | | | | GB | 1998-20770 | Α | 19980925 |
|----|-----|-----------------|----|----------|---------|-------------|---|----------|
| | | | | | GB | 1998-26938 | Α | 19981209 |
| | | | | | GB | 1999-5969 | Α | 19990317 |
| | | | | | WO | 1999-GB3144 | W | 19990921 |
| | JΡ | 2002525358 | T2 | 20020813 | JΡ | 2000-572198 | | 19990921 |
| | | | | | GB | 1998-20770 | Α | 19980925 |
| | | | | | GB | 1998-26938 | Α | 19981209 |
| | | | | | GB | 1999-5969 | Α | 19990317 |
| | | | | | WO | 1999-GB3144 | W | 19990921 |
| | NZ | 509836 | A | 20030630 | NZ | 1999-509836 | | 19990921 |
| | | | | | GB | 1998-20770 | Α | 19980925 |
| | | | | | GB | 1998-26938 | Α | 19981209 |
| | | | | | GB | 1999-5969 | Α | 19990317 |
| | | | | | WO | 1999-GB3144 | W | 19990921 |
| | zA | 2001002185 | A | 20020618 | z_{A} | 2001-2185 | | 20010315 |
| | | | | | GB | 1998-20770 | Α | 19980925 |
| | ИО | 2001001492 | A | 20010523 | NO | 2001-1492 | | 20010323 |
| | | | | | GB | 1998-20770 | A | 19980925 |
| | | | | | GB | 1998-26938 | Α | 19981209 |
| | | | | | GB | 1999-5969 | Α | 19990317 |
| | | | | | WO | 1999-GB3144 | W | 19990921 |
| | US | 6455520 | В1 | 20020924 | US | 2001-787882 | | 20010323 |
| | | | | | GB | 1998-20770 | | 19980925 |
| | | | | | GB | 1998-26938 | | 19981209 |
| | | | | | GB | 1999-5969 | | 19990317 |
| | | | | | WO | 1999-GB3144 | W | 19990921 |
| os | MAR | RPAT 132:265091 | | | | | | |

O Me

AB R4Z4ZCONHZ1NHCOZ2R2 [I; R2 = Z3R3; R3 = (un)substituted heteroaryl; R4 = (di)(alkyl)amino(alkyl), heterocyclyl(alkyl), heteroaryl(alkyl), etc.; Z = (un)substituted phenylene; Z1= 2-halo- or -alkyl-1,5-phenylene; Z2 = bond or (CH2)1-4; Z3 = bond, O, NH, alkyleneoxy, alkyleneamino, etc.; Z4 = bond, alkylene(oxy), alkyleneamino, etc.] were prepd. as p38 kinase inhibitors. Thus, 3-(ClCH2)C6H4COCl was amidated by 2-methyl-5-nitroaniline and the product aminated by 1-methylpiperazine to give, after redn. and pyridine-3-carbonyl chloride amidation, title compd. II. Data

for biol. activity of I were given.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 38 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:53594 CAPLUS

DN 132:93214

TI Preparation of aminopyridinealkanamides and analogs as nitric oxide

```
synthase inhibitors and reactive oxygen scavengers
      Chabrier De Lassauniere, Pierre-Etienne; Auvin, Serge; Harnett, Jerry;
IN
      Pons, Dominique; Ulibarri, Gerard; Bigg, Dennis
PΑ
      Societe de Conseils de Recherches et d'Applications Scientifiques
      (S.C.R.A.S, Fr.
SO
      PCT Int. Appl., 88 pp.
      CODEN: PIXXD2
DT
      Patent
LA
      French
FAN.CNT 1
      PATENT NO.
                         KIND DATE
                                                APPLICATION NO. DATE
                                                 _____
      WO 2000002860
PΙ
                        A1
                                20000120
                                               WO 1999-FR1610 19990705
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
               DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
               MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
               CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                 FR 1998-8732
                                                                 A 19980708
                                                 FR 1999-4133
                                                                 A 19990402
      FR 2780971
                          A1
                                20000114
                                                 FR 1998-8732
                                                                    19980708
      FR 2780971
                          В1
                                20010928
      FR 2791674
                         A1
                                20001006
                                                 FR 1999-4133
                                                                    19990402
      CA 2337258
                         AA
                                20000120
                                                 CA 1999-2337258 19990705
                                                 FR 1998-8732 A 19980708
                                                 FR 1999-4133
                                                                 A 19990402
                                                 WO 1999-FR1610 W 19990705
     AU 9946223
                          Α1
                                20000201
                                                 AU 1999-46223
                                                                    19990705
     AU 756221
                          B2
                                20030109
                                                 FR 1998-8732 A 19980708
                                                 FR 1999-4133
                                                                A 19990402
                                                 WO 1999-FR1610 W 19990705
     EP 1095020
                          A1
                                20010502
                                                 EP 1999-929395 19990705
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO
                                                 FR 1998-8732
                                                                 A 19980708
                                                 FR 1999-4133
                                                                 A 19990402
                                                 WO 1999-FR1610 W 19990705
     JP 2002520317
                          T2
                               20020709
                                                 JP 2000-559091 19990705
                                                                A 19980708
                                                 FR 1998-8732
                                                 FR 1999-4133
                                                                 A 19990402
                                                 WO 1999-FR1610 W 19990705
     TW 509677
                          В
                                20021111
                                                 TW 1999-88111513 19990818
                                                 FR 1998-8732
                                                                A 19980708
                                                 FR 1999-4133
                                                                 A 19990402
     NO 2001000031
                               20010105
                                                 NO 2001-31
                                                                  20010103
                                                 FR 1998-8732
                                                                A 19980708
                                                 FR 1999-4133
                                                                A 19990402
                                                WO 1999-FR1610 W 19990705
OS
     MARPAT 132:93214
GΙ
```

<12/10/2003>

Patel

$$H_{2}N$$
 N
 CMe_{3}
 CMe_{3}

AB RZZ1Z2NH2 [I; R = free-radical scavenging moiety, e.g., (un)substituted Ph, -naphthyl, 2,5,7,8-tetramethyl-6-hydroxy- or -alkoxy-2H-1-benzopyran-2-yl, etc.; Z = NHCO, COZ3, etc.; Z1 = alk(en)ylene, (CH2)nNR13(CH2)p, etc.; R13 = H or alkyl; Z2 = (un)substituted pyridine-m,6-diyl; Z3 = (homo)piperazinediyl; m = 2-5; n,p = 0-6] were prepd. Thus, 6-(2,5-dimethylpyrrolo)-4-methyl-2-pyridinepentanoic acid was amidated by 4-amino-2,6-bis(1,1-dimethylethyl)phenol (prepn. each given) and the product deprotected to give title compd. II. Data for biol. activity of I were given.

II

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 39 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1999:511140 CAPLUS
- DN **131:157771**
- TI Preparation of five-membered, benzo-condensed heterocycles as antithrombotics
- IN Ries, Uwe; Hauel, Norbert; Mihm, Gerhard; Priepke, Henning; Binder, Klaus; Stassen, Jean Marie; Wienen, Wolfgang; Zimmermann, Rainer
- PA Boehringer Ingelheim Pharma Kg, Germany
- SO PCT Int. Appl., 250 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN CNT 2

| FAN. | | | | | | | | | | | | | | | | | | | |
|------|----------------------------|-------------------------|-----|-----|-----|-----|------|------|-----|-----|-------|-------|-------|-------|-------|-------|-----|-----|------------------------|
| | PA: | TENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON No | 0. | DATE | | | | |
| PI | WO | 9940 | 072 | | Α | 1 | 1999 | 0812 | | W | 0 19 | 99-E | P537 | | 1999 | 0128 | | | |
| | | W: | AL, | ΑM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, | |
| | | | DK, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | |
| | | | | | | | ΚZ, | | | | | | | | | | | | |
| | | | MW, | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | |
| | TR, TT, UA, UG, UZ, VN | | | | | | | VN, | YU, | ZW, | AM, | ΑZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | $\mathbf{M}\mathbf{T}$ |
| | RW: GH, GM, KE, LS, MW, SD | | | | | | SD, | SZ, | ŬĠ, | ZW, | ΑT, | BE, | CH, | CY, | DE, | DK, | ES, | | |
| | | FI, FR, GB, GR, IE, IT, | | | | | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | | |
| | | | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | • | |
| | | | | | | | | | | Di | E 199 | 98-19 | 98040 | 085A | 1998 | 80203 | 3 | | |
| | | | | | | | | | | D1 | E 199 | 98-19 | 98343 | 325A | 1998 | 80730 |) | | |
| | | 1980 | | | A. | L | 1999 | 0805 | | D | E 199 | 98-19 | 98040 | 085 : | 1998 | 0203 | | | |
| | DE 19834325 A1 20000217 | | | | | | | 0217 | | D) | E 199 | 98-19 | 98343 | 325 | 19980 | 0730 | | | |
| | CA 2319494 AA 19990812 | | | | | | | 0812 | | C | A 199 | 99-23 | 31949 | 94 : | 1999(| 0128 | | | |
| | | | | | | | | | | Di | E 199 | 98-19 | 9804(| 085A | 1998 | 30203 | 3 | | |
| | | | | | | | | | | D | ₹ 199 | 98-19 | 98343 | 325A | 1998 | 30730 |) | | |
| | | | | | | | | | | | 199 | | | | | | | | |

```
19990823
                                               AU 1999-27201
     AU 9927201 A1
                                                                 19990128
                                               DE 1998-19804085A 19980203
                                               DE 1998-19834325A 19980730
                                               WO 1999-EP537 W 19990128
                                               EP 1999-907437 19990128
     EP 1060166
                              20001220
                       A1
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                                               DE 1998-19804085A 19980203
                                               DE 1998-19834325A 19980730
                                               WO 1999-EP537 W 19990128
                                               JP 2000~530502 19990128
     JP 2002502844 T2
                              20020129
                                               DE 1998-19804085A 19980203
                                               DE 1998-19834325A 19980730
                                               WO 1999-EP537 W 19990128
PATENT FAMILY INFORMATION:
FAN 1999:505930
                       A1 19990805 DE 1998-19804085 19980203
AA 19990812 CA 1999-2319494
     PATENT NO.
     -----
     DE 19804085 A1
PΙ
     CA 2319494
                                               DE 1998-19804085A 19980203
                                               DE 1998-19834325A 19980730
                                               WO 1999-EP537 W 19990128
     WO 9940072 A1 19990812 WO 1999-EP537 19990128
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
              CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                               DE 1998-19804085A 19980203
                                               DE 1998-19834325A 19980730
     AU 9927201 A1 19990823
                                               AU 1999-27201 19990128
                                               DE 1998-19804085A 19980203
                                               DE 1998-19834325A 19980730
                                               WO 1999-EP537 W 19990128
                                               EP 1999-907437 19990128
     EP 1060166 A1 20001220
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                                               DE 1998-19804085A 19980203
                                               DE 1998-19834325A 19980730
                                               WO 1999-EP537 W 19990128
                                               JP 2000-530502 19990128
     JP 2002502844
                       Т2
                              20020129
                                               DE 1998-19804085A 19980203
                                               DE 1998-19834325A 19980730
                                               WO 1999-EP537 W 19990128
                                               US 1999-243200 19990202
     US 6114532 A
                              20000905
                                               DE 1998-19804085A 19980203
                                               US 1998-77694P P 19980312
                                               DE 1998-19834325A 19980730
os
     MARPAT 131:157771
GI
```

$$R^{1}Z$$
 X
 A
 R^{2}
 R
 R
 R

Title compds. [I; R = 5-C6H5SO2NH, 6-C6H5SO2NH, 5-C6H5NHSO2, 5-C6H5SO2N(CH2COOEt), 5-C6H5SO2N(CH3), 5-C6H5N(CH2CH2CH2CH2COOEt)CO, 5-C6H5, CH3N(C6H5)CO, 8; R1 = H, 7-CH3, 3-Br, 3-EtO; R2 = C(:NH)NH2; A = CH2, NH; X = CH, MeN, EtoCocH2CH2N, O, S, NCH2CO2H; Y = N, CH, CH:CH; Z = CH, N; dotted bond = single, double in relation to X; A is attached at 2,or 8 position depending on the heterocyclic ring] and their tautomers, stereoisomers, mixts. and their physiol. compatible salts with inorg. or org. acids or bases are prepd. and title compds in which R2 is a cyano group, present valuable intermediate products for the prodn. of the remaining compds. of the general formula I, with R2 is amidino, which have valuable pharmacol. properties, esp. an antithrombotic activity. Thus, the title compd. II was prepd.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 40 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1999:421639 CAPLUS
- DN 131:58657
- TI Thiourea and benzamide compounds, compositions and methods of treating or preventing inflammatory diseases and atherosclerosis
- IN Connor, David Thomas; Roark, William Howard; Sexton, Karen; Sorenson, Roderick Joseph
- PA Warner-Lambert Company, USA
- SO PCT Int. Appl., 226 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

| | PATENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON N | ο. | DATE | | | |
|----|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| PI | WO 9932 |
433 | |
A |
1 | 1999 |
0701 | |
W | 0 19 |
98–Մ |
S246 |
88 | 1998 |
1120 | | |
| | W: AL, AU,
IS, JP,
RO, SG,
KZ, MD, | | | KP,
SI, | KR,
SK, | LC,
SL, | LK, | CA,
LR, | CN,
LT, | CU,
LV, | CZ,
MG, | EE,
MK, | GE,
MN, | HR,
MX, | HU, | ID,
NZ, | PL. |
| | RW: | GH,
FI, | GM,
FR, | KE,
GB, | LS,
GR, | MW,
IE, | SD,
IT, | SZ,
LU, | UG,
MC, | ZW,
NL, | AT,
PT, | BE,
SE, | CH,
BF, | CY,
BJ, | DE,
CF, | DK,
CG, | ES,
CI, |

Patel

| | CM, GA, | GN, GW | , ML, MR, | NE, | SN, TD, TG |
|-----|------------|--------|-----------|-----|-------------------------------------|
| ~-> | 0000107 | 20.20 | 10000701 | | US 1997-68604P P 19971223 |
| CA | 2300197 | AA | 19990701 | | CA 1998-2300197 19981120 |
| | | | | | US 1997-68604P P 19971223 |
| | 1-005 | _ 4 | 10000510 | | WO 1998-US24688W 19981120 |
| AU | 9915297 | A1 | 19990712 | | |
| | | | | | US 1997-68604P P 19971223 |
| | | _ | | | WO 1998-US24688W 19981120 |
| BR | 9814327 | A | 20001003 | | BR 1998-14327 19981120 |
| | | | | | US 1997-68604P P 19971223 |
| | | | | | WO 1998-US24688W 19981120 |
| EP | | | | | EP 1998-959510 19981120 |
| | | | | FR, | GB, GR, IT, LI, LU, NL, SE, MC, PT, |
| | IE, SI, | LT, LV | , FI, RO | | |
| | | | | | US 1997-68604P P 19971223 |
| | | | | | WO 1998-US24688W 19981120 |
| JP | 2001526255 | T2 | 20011218 | | JP 2000-525370 19981120 |
| | | | | | US 1997-68604P P 19971223 |
| | | _ | | | WO 1998-US24688W 19981120 |
| NZ | 502963 | Α | 20020628 | | NZ 1998-502963 19981120 |
| | | | | | US 1997-68604P P 19971223 |
| | | _ | | | WO 1998-US24688W 19981120 |
| ZA | 9811805 | A | 19990629 | | ZA 1998-11805 19981222 |
| | | _ | 00001100 | | US 1997-68604P P 19971223 |
| MX | 200001870 | Α | 20001109 | | MX 2000-1870 20000223 |
| | | | | | US 1997-68604P P 19971223 |
| | | | 00010501 | | WO 1998-US24688W 19981120 |
| บร | 6268387 | B1 | 20010731 | | US 2000-529135 20000405 |
| | | | | | US 1997-68604P P 19971223 |
| | | | | | WO 1998-US24688W 19981120 |
| | 2001031874 | | | | US 2001-858089 20010515 |
| US | 6528528 | В2 | 20030304 | | 777 1007 COCOAD D 10071000 |
| | | | | | US 1997-68604P P 19971223 |
| | | | | | WO 1998-US24688W 19981120 |
| | | | | | US 2000-529135 A320000405 |

OS MARPAT 131:58657

GΙ

$$R^{2}$$
 R^{2}
 R^{2}
 R^{4}
 R^{4}
 R^{4}
 R^{2}
 R^{4}
 R^{4}
 R^{2}
 R^{4}
 R^{4}
 R^{2}
 R^{4}
 R^{4

The invention provides compds. I [X = NH, O, S, NHC(:S)NH, CONH, NHCO, (CH2)n, etc., or their alkyl derivs.; n = 0-3; Y = NH, CONH, NHCO, CH2CH2, NHSO2, etc., or their alkyl derivs.; Q = alkyl, (un)substituted Ph or heteroaryl, (di)(alkyl)amino, or cycloalkyl; R1-R4 = H, alkoxy, alkyl, halo, OH, CF3, cyano, (un)substituted (hetero)aryl, etc.; R5 = H, alkyl,

(un) substituted heteroaryl, naphthyl, benzyl, or dansyl; with several provisos]. The invention also provides methods of treating or preventing inflammation or atherosclerosis, and a pharmaceutical compn. that contains a compd. I. The compds. are inhibitors of 15-lipoxygenase (15-LO), and act as inhibitors of the chemotaxis of monocytes. Approx. 280 synthetic examples are given. For instance, amidation of 3-nitro-4-methoxybenzoic acid with 3,4-dichloroaniline using oxalyl chloride and DMF catalyst in THF/CH2Cl2 mixt., followed by hydrogenation over Raney Ni, gave title compd. II. The latter had an IC50 of 10 nM against human 15-LO in vitro.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 41 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     1999:325902 CAPLUS
DN
     130:352546
     Preparation of amides containing leucine or methionine for inhibition of
TI
     the interaction of vascular cell-adhesion molecule-1 (VCAM-1) and
     fibronectin with integrin very late antigen 4 (.alpha.4.beta.1)
     Brittain, David Robert; Johnstone, Craig
IN
PΑ
     Zeneca Limited, UK
     PCT Int. Appl., 74 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
                                            _____
     _____
                       ____
     WO 9924398 A2
                             19990520
                                             WO 1998-GB3334
                                                               19981109
PI
     WO 9924398
                      A3 19990805
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                             GB 1997-23789 A 19971112
                                             CA 1998-2308716 19981109
     CA 2308716
                        AA
                             19990520
                                             GB 1997-23789 A 19971112
                                             WO 1998-GB3334 W 19981109
                        A1
                             19990531
                                             AU 1999-10420
                                                               19981109
     AU 9910420
                                             GB 1997-23789 A 19971112
                                             WO 1998-GB3334 W 19981109
     EP 1030835
                        A2
                             20000830
                                             EP 1998-952872
                                                               19981109
                             20030122
     EP 1030835
                        В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                                             GB 1997-23789 A 19971112
                                             WO 1998-GB3334 W 19981109
     JP 2001522831
                        T2
                             20011120
                                             JP 2000-520412
                                                               19981109
                                             GB 1997-23789 A 19971112
                                             WO 1998-GB3334 W 19981109
                                             AT 1998-952872
     AT 231488
                        Ε
                             20030215
                                                               19981109
                                             GB 1997-23789 A 19971112
                                             WO 1998-GB3334 W 19981109
                        Α
                             19990512
                                             ZA 1998-10330
     ZA 9810330
                                                               19981111
```

| | | | | GΒ | 1997-23789 | Α | 19971112 |
|----------|-------------------|----|----------|----|-------------|---|----------|
| | NO 2000002158 | A | 20000711 | ИО | 2000-2158 | | 20000427 |
| | | | | GB | 1997-23789 | Α | 19971112 |
| | | | | WO | 1998-GB3334 | W | 19981109 |
| | US 6344570 | В1 | 20020205 | US | 2000-554224 | | 20000711 |
| | | | | GB | 1997-23789 | Α | 19971112 |
| | | | | WO | 1998-GB3334 | W | 19981109 |
| OS
GT | MARPAT 130:352546 | | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I; R1 = II (in the para or meta position); R2, R3 = H, NO2, alkyl, etc.; R2 and R3 together with the Ph to which they are attached form a 9-10 membered bicyclic ring system; R4 = alkyl; R5 = H, alkyl; R6 = alkyl, alkylcycloalkyl, alkylalkoxyl, etc.; R7 = alkyl, alkoxylcarbonyl, alkenyl, etc.; R8 = (un)substituted aryl, heteroaryl, bicyclic heteroaryl ring system linked to the nitrogen via a ring carbon, etc.; R9, R10 = H, alkyl; NR8R9 = dihydroindolyl, dihydroquinolinyl; R11 = CO2H, tetrazolyl, alkyl sulfonylcarbamyl, sulfo, sulfino; Y = O, S, SO2; m = 0-1; n = 0-4; with the proviso that when m and n cannot both be 0 and when m = 1, n = 0] and their pharmaceutically acceptable salts, useful in the treatment of multiple sclerosis, rheumatoid arthritis, asthma, coronary artery disease and psoriasis, were prepd. E.g., a multi-step synthesis of amide III was given. Compds. I are effective at 0.1-15 mg/kg/day.

- L7 ANSWER 42 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1999:311177 CAPLUS
- DN 130:352091
- TI Preparation of ureidophenylacetanilides and analogs as integrin-mediated cell adhesion inhibitors
- IN Astles, Peter Charles; Clark, David Edward; Collis, Alan John; Cox, Paul Joseph; Eastwood, Paul Joseph; Harris, Neil Victor; Lai, Justine Yeun Quai; Morley, Andrew David; Porter, Barry
- PA Rhone-Poulenc Rorer Limited, UK
- SO PCT Int. Appl., 125 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

| T. TATA • | CIVI | 1 | | | | | | | | | | | | | | | | | |
|-----------|-----------------|-------|-----|-----|-----|------|------|------|-----|--------------|------|------|------|-----|------|------|-----|-----|------------------------|
| | PA. | ENT : | NO. | | KI | ND : | DATE | | | \mathbf{A} | PPL | CATI | N NC | 0. | DATE | | | | |
| | | | | | | | | | | | | | | | | | | | |
| PI | WO | 9923 | 063 | | A | 1 | 1999 | 0514 | | W |) 19 | 98-G | B329 | 4 | 1998 | 1102 | | | |
| | | W: | ΑL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, | |
| | | | DK, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IS, | JP, | KE, | |
| | KG, KP, KR, KZ, | | | | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | | |
| | MX, NO, | | | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | | |
| | | | TT, | UA, | ŪG, | US, | UZ, | VN, | YU, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | $\mathbf{T}\mathbf{M}$ |
| | | RW: | GH, | GM, | KE, | LS, | MW, | SD, | SZ, | ŪG, | ZW, | AT, | BE, | CH, | CY, | DE, | DK, | ES, | |
| | | | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | |
| | | | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | |
| | | | | | | | | | | G: | B 19 | 97-2 | 3072 | Α | 1997 | 1031 | | | |

US 1997-69695P P 19971216

OS

AB

```
GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
CA 2303848
           AA
                      19990514
                                     CA 1998-2303848 19981102
                                     GB 1997-23072 A 19971031
                                     US 1997-69695P P 19971216
                                     GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
                                     WO 1998-GB3294 W 19981102
              A1
                                     AU 1998-97550
                                                      19981102
AU 9897550
                      19990524
AU 748041
                 в2
                      20020530
                                     GB 1997-23072 A 19971031
                                     US 1997-69695P P 19971216
                                     GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
                                     WO 1998-GB3294 W 19981102
ZA 9810004
                 Α
                      20000502
                                     ZA 1998-10004 19981102
                                     GB 1997-23072 A 19971031
                                EP 1998-951596 19981102
                 Al 20000816
EP 1027328
    R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
        SI, FI, RO
                                     GB 1997-23072 A 19971031
                                     US 1997-69695P P 19971216
                                     GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
                                     WO 1998-GB3294 W 19981102
                                                   19981102
BR 9813331
                Α
                      20000822
                                     BR 1998-13331
                                     GB 1997-23072 A 19971031
                                     US 1997-69695P P 19971216
                                     GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
                                     WO 1998-GB3294 W 19981102
                      20011113
                                     JP 2000-518939 19981102
JP 2001521921
                 T2
                                     GB 1997-23072 A 19971031
                                     US 1997-69695P P 19971216
                                     GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
                                     WO 1998-GB3294 W 19981102
NZ 503407
                Α
                      20020828
                                     NZ 1998-503407 19981102
                                     GB 1997-23072 A 19971031
                                     US 1997-69695P P 19971216
                                     GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
                                     WO 1998-GB3294 W 19981102
US 6479519
                 В1
                      20021112
                                     US 2000-558812 20000426
                                     GB 1997-23072 A 19971031
                                     US 1997-69695P P 19971216
                                     GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
                                     WO 1998-GB3294 A119981102
NO 2000002276
                Α
                      20000525
                                     NO 2000-2276 20000428
                                     GB 1997-23072 A 19971031
                                     US 1997-69695P P 19971216
                                     GB 1998-14276 A 19980701
                                     US 1998-104287PP 19981014
                                     WO 1998-GB3294 W 19981102
MARPAT 130:352091
R1NHCONHR2 [I; R1 = (un) substituted Ph or -2-pyridyl; R2 = ZZ1Z2Z3R; R =
```

CO2H, CONY1Y2, etc.; Y1,Y2 = H, (cyclo)alk(en)ylene, (hetero)aryl, etc.; NY1Y2 = heterocyclyl; Z = (un)substituted phenylene, -pyridinediyl, -pyrimidinediyl, etc.; Z1 = CH2CONR4, etc.; R4 = H or alkyl; Z2 = (hetero)arylene; Z3 = (un)substituted alkylene, etc.], which regulate interaction of VCAM-1 and fibronectin with integrin .alpha.4.beta.1, were prepd. Thus, (R)-2-MeC6H4NHCONHZCH2CONHZ2CH(NHSO2Me)CH2CO2H (Z = 2-methoxy-1,4-phenylene, Z2 = 1,4-phenylene) was prepd. in 9 steps from 2-nitroanisole. Data for biol. activity of I were given.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7 ANSWER 43 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 1999:34888 CAPLUS

DN 130:66491

TI Preparation of urea derivatives as inhibitors of p38

IN Salituro, Francesco Gerald; Bemis, Guy W.; Green, Jeremy; Kofron, James L.

PA Vertex Pharmaceuticals Incorporated, USA

SO PCT Int. Appl., 93 pp.

CODEN: PIXXD2
DT Patent

LA English

FAN.CNT 1

```
KIND DATE
    PATENT NO.
                                    APPLICATION NO. DATE
    WO 9900357 A1 19990107 WO 1998-US13496 19980629
PΙ
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
            UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, ML, MR, NE, SN, TD, TG
                                         US 1997-884160 A 19970627
    US 6093742
                          20000725
                                         US 1997-884160 19970627
    AU 9883776
                     A1
                          19990119
                                         AU 1998-83776
                                                        19980629
                                         US 1997-884160 A 19970627
                                         WO 1998-US13496W 19980629
    EP 993441
                     A1
                          20000419
                                         EP 1998-934195 19980629
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                                         US 1997-884160 A 19970627
```

OS MARPAT 130:66491

AB The title compds. WX1C(:Y)X2Z [W = (un)substituted satd., partially satd. or arom. monocyclic or bicyclic ring system optionally comprising up to 4 heteroatoms; Y = O, etc.; X1, X2 = O, S, etc.; Z = cycloalkyl, etc.] are prepd. Compds. of this invention are inhibitors of p38, a mammalian protein kinase involved in cell proliferation, cell death and response to extracellular stimuli. In in vitro assays for inhibition of phosphorylation of EGF receptor peptide, compds. of this invention showed IC50 values of 0.14 .mu.M to 19 .mu.M.

WO 1998-US13496W 19980629

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 44 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN AN 1999:9833 CAPLUS

```
DN
      130:66494
      Preparation of novel guanidine mimics as factor Xa inhibitors
 ΤT
      Lam, Patrick Y.; Clark, Charles G.; Dominguez, Celia; Fevig, John Matthew;
 IN
      Han, Qi; Li, Renhua; Pinto, Donald Joseph-Phillip; Pruitt, James Russell;
      Quan, Mimi Lifen
 PA
      The Du Pont Merck Pharmaceutical Company, USA
      PCT Int. Appl., 268 pp.
      CODEN: PIXXD2
DT
      Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                            APPLICATION NO.
PΙ
     WO 9857951
                       A1
                             19981223
                                           WO 1998-US12680 19980618
         W: AU, BR, CA, CN, CZ, EE, HU, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, UA, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE
                                             US 1997-878884 A 19970619
     ZA 9805247
                        Α
                             19991217
                                             ZA 1998-5247 19980617
                                             US 1997-878884 A 19970619
     AU 9879768
                        Α1
                             19990104
                                             AU 1998-79768
                                                              19980618
     AU 756755
                        B2
                             20030123
                                             US 1997-878884 A 19970619
                                             WO 1998-US12680W 19980618
                             20000412
     EP 991638
                       A1
                                             EP 1998-930361 19980618
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
              SI, LT, LV, FI, RO
                                             US 1997-878884 A 19970619
                                             WO 1998-US12680W 19980618
     BR 9810137
                        Α
                             20000808
                                             BR 1998-10137
                                                             19980618
                                             US 1997-878884 A 19970619
                                             WO 1998-US12680W 19980618
     EE 9900583
                        Α
                             20000815
                                             EE 1999-583
                                                              19980618
     EE 4153
                        В1
                             20031015
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
     JP 2002505686
                        T2
                             20020219
                                             JP 1999-504785 19980618
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
     NZ 502370
                        Α
                             20021025
                                            NZ 1998-502370 19980618
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
     NO 9905965
                       Α
                             19991203
                                            NO 1999-5965
                                                              19991203
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
     MX 9911908
                       Α
                             20000531
                                            MX 1999-11908
                                                            19991216
                                            US 1997-878884 A 19970619
                                            WO 1998-US12680W 19980618
     LV 12496
                       В
                             20010120
                                            LV 1999-178
                                                            19991216
                                            US 1997-878884 A 19970619
     LT 4705
                             20000925
                                            LT 1999-147
                                                             19991217
                                            US 1997-878884 A 19970619
OS
    MARPAT 130:66494
GI
```

AΒ The title compds. [I; rings D-E represent guanidine mimics; ring D = CH2N:CH, CH2CH2N:CH, a 5-6 membered arom. system contg. 0-2 heteroatoms selected form the group N, O, and S; ring D is substituted with 0-2 R (substituents), provided that when ring D is unsubstituted, it contains at least one heteroatom; ring E contains 0-2 N atom and is substituted by 0-1R; R = halo, OH, C1-3 alkoxy, etc.; M = (un) substituted pyrazole, imidazole, tetrazole, etc.], inhibitors of factor Xa which are useful in treating and preventing a thromboembolic disorder, were prepd. and formulated. Thus, a multi-step synthesis of the title compd. II, starting with 7-aminoisoquinoline, was described. A no. of compds. I were found to exhibit a Ki of .ltoreq. 15 .mu.M against factor Xa.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 45 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN1999:9820 CAPLUS

DN 130:81510

ΤI Preparation of phenylpyrazolecarboxamides as coaqulation factor Xa inhibitors

Galemmo, Robert Anthony, Jr.; Dominguez, Celia; Fevig, John Matthew; Han, ΙN Qi; Lam, Patrick Yuk-sun; Pinto, Donald Joseph Philip; Pruitt, James Russell; Quan, Mimi Lifen

The Du Pont Merck Pharmaceutical Company, USA PA

SO PCT Int. Appl., 259 pp. CODEN: PIXXD2

DT Patent

LΑ English

| FAN. | CNT | 1 | | | | | | | | | | | | | | | | |
|------|----------------------|------|------------|---|----------------------------|-----|------|--------------------------|-----|------------------|------|-------|------|-----|------------|------|-----|-----|
| | PATENT NO. KIND DATE | | | | APPLICATION NO. DATE | | | | | | | | | | | | | |
| PI | WO 9857937 | | | | A2 19981223
A3 19990318 | | | WO 1998-US12681 19980618 | | | | | | | | | | |
| | | W: | AU,
RO, | • | CA, | CN, | CZ, | EE, | • | • | • | • | • | • | MX,
RU, | • | • | PL, |
| | | RW: | AT,
PT, | | CH, | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, |
| | | | | | | | | | | U. | s 19 | 97-5 | 0219 | P P | 1997 | 0619 | | |
| | | | | | | | | | | U | s 19 | 97-8 | 7888 | 5 A | 1997 | 0619 | | |
| | | | | | | | | | | U: | s 19 | 98-7 | 6691 | P P | 1998 | 0227 | | |
| | ZA | 9805 | 251 | | Α | | 1999 | 1217 | | \mathbf{z}_{i} | A 19 | 98-5. | 251 | | 1998 | 0617 | | |
| | | | | | | | | | | U. | s 19 | 97-8 | 7888 | 5 A | 1997 | 0619 | | |
| | ΑU | 9881 | 503 | | A | 1 | 1999 | 0104 | | A | J 19 | 98-8 | 1503 | | 1998 | 0618 | | |
| | | | | | | | | | | U | 5 19 | 97-8 | 7888 | 5 A | 1997 | 0619 | | |

| | | | | | បន | 1998-76691P | P 19980227 | | |
|------|----------------|--------|----------|---|------------|--------------|------------|-----|-----|
| | | | | | WO | 1998-US12681 | W 19980618 | | |
| บร | 5998424 | A | 19991207 | | US | 1998-99752 | 19980618 | | |
| | | | | | US | 1997-50219P | P 19970619 | | |
| | | | | | US | 1998-76691P | P 19980227 | | |
| EР | 991625 | A2 | 20000412 | | | 1998-931355 | | | |
| | | | | | | R, IT, LI, L | | PТ. | TF. |
| | SI, LT, | | | , | <i>,</i> - | ,, - | -,,, | , | , |
| | 01, 11, | 11, 11 | , 1.0 | | US | 1997-878885 | A 19970619 | | |
| | | | | | | 1998-76691P | | | |
| | | | | | | 1998-US12681 | | | |
| ВB | 9810151 | 7. | 20000808 | | | 1998-10151 | | | |
| DIC | J010131 | Λ | 20000000 | | | 1997-878885 | | | |
| | | | | | | 1998-76691P | | | |
| | | | | | | 1998-US12681 | | | |
| 50 | 9900584 | А | 20000815 | | | 1999-584 | | | |
| 20 | 9900304 | A | 20000013 | | | 1997-878885 | | | |
| | | | | | | 1998-76691P | | | |
| | | | | | | 1998-US12681 | | | |
| αт | 20209 | C | 20001031 | | | 1998-20043 | | | |
| ÐΤ | 20208 | C | 20001031 | | | 1997-878885 | | | |
| | | | | | | 1998-76691P | | | |
| | | | | | | 1998-US12681 | | | |
| τn | 2002507968 | шЭ | 20020312 | | | 1999-504786 | | | |
| ΟF | 2002307300 | 12 | 20020312 | | | 1997-878885 | | | |
| | | | | | | 1998-76691P | | | |
| | | | | | | 1998-US12681 | | | |
| ΙΙC | 6403620 | В1 | 20020611 | | | 1999-393782 | | | |
| 0.5 | 0403020 | DI | 20020011 | | | 1998-99752 | | | |
| т.37 | 12516 | В | 20010320 | | | 1999-177 | | | |
| 71 0 | 12010 | | 20010320 | | | 1997-878885 | | | |
| | | | | | | 1998-76691P | | | |
| NO | 9906316 | A | 19991217 | | | 1999-6316 | | | |
| 1,0 | 3300010 | | 1000101, | | | 1997-878885 | | | |
| | | | | | | 1998-76691P | | | |
| | | | | | | 1998-US12681 | | | |
| יי.ד | 4702 | В | 20000925 | | | 1999-146 | | | |
| 10 1 | 1702 | _ | 80000520 | | | 1997-878885 | | | |
| IIS | 2003092740 | A1 | 20030515 | | | 2002-150698 | | | |
| | 6602895 | B2 | 20030805 | | • | 2002 20000 | | | |
| UD | 0002000 | | 23000000 | | US | 1997-50219P | P 19970619 | | |
| | | | | | | 1998-76691P | | | |
| | | | | | | 1998-99752 | | | |
| | | | | | | 1999-393782 | | | |
| MAT | RPAT 130:81510 |) | | | | | | | |
| | | - | | | | | | | |

os

GI

Patel

AB EZ1M [I; E = halo, OH, alkyl, aloxy, etc.; M = Z2ZAB; A = (un)substituted carbocyclylene, -heterocyclylene; B = H, Y, XY; X = alkylene, CO, O, (un)substituted NH, etc.; Y = amino(alkyl), substituted carbocyclyl, -heterocyclyl, etc.; Z = bond, (heteroatom- or functional group-interrupted) alkylene, etc.; Z1 = (un)substituted Ph, Z2 = N-contg. heteroarylene, etc.] were prepd. Thus, MeCOCH2C(:NOMe)CO2Et was cyclocondensed with PhNHNH2 and the product amidated by 4-(H2N)C6H4C6H4(SO2NHCMe3)-2 to give, after deprotection, title compd. II. Data for biol. activity of I were given.

```
L7 ANSWER 46 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 1998:394328 CAPLUS

DN 129:67773

TI Preparation of benzamide derivatives having a vasopressin antagonistic activity

IN Setoi, Hiroyuki; Ohkawa, Takehiko; Zenkoh, Tatsuya; Sawada, Hitoshi; Sawada, Yuki; Oku, Teruo

PA Fujisawa Pharmaceutical Co., Ltd., Japan; Setoi, Hiroyuki; Ohkawa, Takehiko; Zenkoh, Tatsuya; Sawada, Hitoshi; Sawada, Yuki; Oku, Teruo

SO PCT Int. Appl., 332 pp.

MARPAT 129:67773

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

OS

GI

Patel

| PATENT NO. | | APPLICATION NO. | DATE |
|---------------|-------------------|---|----------------------|
| PI WO 9824771 | Al 19980611 | WO 1997-JP4192
KR, MX, US, AM, AZ, BY, | |
| • | CH, DE, DK, ES, E | FI, FR, GB, GR, IE, IT,
AU 1996-3953 A | |
| AU 9749672 | A1 19980629 | AU 1997-49672
AU 1996-3953 A
WO 1997-JP4192 W | 19971118
19961202 |
| | | EP 1997-912493
FR, GB, GR, IT, LI, LU, | 19971118 |
| ,, | | AU 1996-3953 A
WO 1997-JP4192 W | 19961202 |
| JP 2001505193 | T2 20010417 | JP 1998-521225
AU 1996-3953 A | 19971118 |
| US 6207693 | B1 20010327 | WO 1997-JP4192 W
US 1999-308662 | |
| | | AU 1996-3953 A
WO 1997-JP4192 W | 19961202 |
| US 6316482 | B1 20011113 | US 2000-614132
AU 1996-3953 A | |
| | | US 1999-308662 A3 | |

<12/10/2003>

$$R^{1}$$
 N
 R^{2}
 $A-E-Y$
 R^{3}
 X

AB The title compds. [I; R1 = (un) substituted aryl, cyclo(lower) alkyl, heterocyclyl; R2 = H, lower alkyl, etc.; R3 = H, halo, OH, etc.; A = a single bond, O, NH; E = lower alkylene, lower alkenylene, etc.; X = CH:CH, CH:N, S; Y = (un) substituted aryl, condensed heterocyclyl, etc.] and their pharmaceutically acceptable salts, useful in treatment and/or prevention of hypertension, heart failure, renal insufficiency, edema, ascites, vasopressin parasecretion syndrome, hepatocirrhosis, hyponatremia, hypokalemia, diabetic, circulation disorder, cerebrovascular disease, Meniere's disease or motion sickness, were prepd. Thus, the title compd. II showed IC50 of 1.5 nM against vasopressin 1 receptor binding.

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 47 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1998:42277 CAPLUS
- DN 128:110886
- TI Phenylurea IL-8 receptor antagonists, preparation thereof, and therapeutic use
- IN Widdowson, Katherine L.
- PA Smithkline Beecham Corp., USA; Widdowson, Katherine L.
- SO PCT Int. Appl., 42 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN. CNT 1

| TAM - CIVI I | | | | |
|---------------|------|----------|-----------------|----------|
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| | | | ~_~~~~~~ | |
| PI WO 9749399 | A1 | 19971231 | WO 1997-US10904 | 19970624 |
| ₩• JP | US | | | |

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

US 1996-22000P P 19960627 EP 907362 A1 19990414 EP 1997-930205 19970624

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

US 1996-22000P P 19960627

WO 1997-US10904W 19970624

20001010 JP 1998-503449 19970624

US 1996-22000P P 19960627

WO 1997-US10904W 19970624

OS MARPAT 128:110886

JP 2000513359

AB Phenylurea derivs. (Markush included) are provided for the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8). Prepn. of e.g. N-(2-hydroxy-4-nitrophenyl)-N'-(2-pyridyl)urea is described. Diseases treatable by the compds. of the invention include e.g. psoriasis, asthma, chronic obstructive pulmonary disease, stroke, and Alzheimer's disease.

- L7 ANSWER 48 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1998:1292 CAPLUS
- DN 128:71993
- TI Preparation of herbicidal pyrazole derivatives
- IN Mathews, Christopher John; Baker, Don Robert

T2

- PA Zeneca Ltd., UK
- SO U.S., 21 pp.

CODEN: USXXAM

- DT Patent
- LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| | | | | | |
| PI | US 5698495 | Α | 19971216 | US 1996-742010 | 19961031 |
| | US 5786302 | A | 19980728 | US 1997-905749 | 19970804 |
| | | | | US 1996-742010 | 19961031 |

OS MARPAT 128:71993

GI

The pyrazole derivs. I [R1 = (un) substituted alkyl or haloalkyl; R2 = R1, (un) substituted cycloalkyl; R3 = H, halo, alkyl or haloalkyl; R4 = (un) substituted alkyl, haloalkyl, alkoxy, etc.; R5 = H, (un) substituted alkyl or alkoxyalkyl; R6-9 = H, halo, (un) substituted alkyl, alkenyl, alkynyl, etc.; A = O, S, SO or SO2; Z = S or bond] are prepd. as herbicides.

```
ANSWER 49 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
L7
ΑN
     1997:684401 CAPLUS
DN
     127:346304
ΤI
     Preparation of pyridinioarylcarbamoylindoline derivatives as serotonin
     receptor antagonists.
IN
     Bromidge, Steven Mark
PΑ
     Smithkline Beecham Plc, UK; Bromidge, Steven Mark
SO
     PCT Int. Appl., 21 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO. KIND DATE APPLICATION NO. DATE
                                         ~----
                          19971016 WO 1997-EP1611 19970326
PΤ
     WO 9737989
                    A1
        W: JP, US
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                        GB 1996-7219 A 19960404
     EP 891348 A1 19990120
                                         EP 1997-915465 19970326
        R: BE, CH, DE, ES, FR, GB, IT, LI, NL
                                         GB 1996-7219 A 19960404
                                         WO 1997-EP1611 W 19970326
     JP 2001508399 T2 20010626
                                         JP 1997-535805 19970326
                                         WO 1997-EP1611 W 19970326
     US 6028085 A
                           20000222
                                         US 1998-155589 19980930
                                         GB 1996-7219 A 19960404
                                         WO 1997-EP1611 W 19970326
OS
    MARPAT 127:346304
AΒ
     (R1)nP1A[P2(R2)m]NR3COR4 [R1, R2 = H, (substituted) alkyl; R3 = H, alkyl;
     R4 = (substituted) N-bonded bicycloheterocyclyl, aminopyrazinyl,
     aminopyridinyl, aminophenyl, etc.; P1, P2 = Ph, heterocyclyl contg. a
     quaternary N atom; A = bond, chain of 1-5 atoms (substituted) phenylene,
    heterocyclylene; n, m = 0-2], were prepd. as 5-HT2B/5-HT2C antagonists
    with increased soly./activity (no data). Thus, 5-methoxy-6-
     trifluoromethyl-1-[3-fluoro-5-(pyridin-3-yl)phenylcarbamoyl]indoline in
    MeCN was treated with sodium tetraphenylboron and bromomethyl acetate
     followed by 4 h reflux to give a tetraphenylborate salt which was
     subjected to ion exchange to give 100% 5-methoxy-6-trifluoromethyl-1-[3-
     fluoro-5-[1-(acetyloxy)methylpyridinium-3-yl]phenylcarbamoyl]indoline
    chloride.
    ANSWER 50 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
L7
AN
    1997:618728 CAPLUS
DN
    127:278147
ΤI
    Preparation of pyridylurea derivatives as antitumor and antiviral agents
IN
    Shudo, Koichi; Fukutomi, Ryuta
PA
    Shudo Koichi, Japan; Nisshin Flour Milling Co., Ltd.
SO
    Jpn. Kokai Tokkyo Koho, 13 pp.
    CODEN: JKXXAF
DT
    Patent
LΑ
    Japanese
FAN.CNT 1
    PATENT NO. KIND DATE
                                   APPLICATION NO. DATE
    _____
                    ---- -----
                                       JP 1996-46086 19960304
JP 1996-46086 19960304
PΙ
    JP 09241243 A2 19970916
```

Patel

CASREACT 127:278147; MARPAT 127:278147 GΙ

$$(R^3 \text{ or } R^4)NH$$
 N NR^5COR^{10}

AΒ The title derivs. I [R1 = C6H4C(:NH)NH2-4, C6H4R7-4, Q; R2 = NR1R6, CH2R7; R7 = N(R8)2, N+R83; R3-R6, R8 = H, C1-6 alkyl] and their pharmaceutically acceptable salts, useful as antitumor and antiviral agents, are prepd. by treatment of R9R3NCOCl (R9 = C6H4CN-4, C6H4Y-4; Y = protected amino) or PhOCONR3R9 with diaminopyridines II followed by conversion of cyano group to guanyl group when R9 = C6H4CN-4 or deprotection of amino group and N-alkylation when R9 = C6H4Y-4. I are also prepd. by condensation of R9NHR3 with diaminopyridines III (R10 = protected aminomethyl) through CO group in the presence of carbonyldiimidazole or by autocondensation of III through CO group in the presence of carbonyldiimidazole followed by conversion of cyano group to guanyl group when R9 = C6H4CN-4 or deprotection of amino group and N-alkylation when R9 = C6H4Y-4 and removal of protective group of R10. N,N'-dimethyl-2,6-diaminopyridine (prepn. given) was treated with 4-(N-phenoxycarbonyl)aminobenzonitrile (prepn. given) in DMSO at 100-110.degree. for 36 h to give N,N'-dimethyl-N,N'bis[(N-4-cyanophenyl)aminocarbonyl]-2,6-diaminopyridine, which in MeOH was bubbled with HCl at 0.degree. and the resulting product in MeOH was bubbled with NH3 at 0.degree. to give N,N'-dimethyl-N,N'-bis[(N-4amidinophenyl)aminocarbonyl]-2,6-diaminopyridine hydrochloride (IV). showed 57% binding rate for DNA derived from calf thymus, which was comparable to or greater than that of netropsin.

- L7 ANSWER 51 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1997:394295 CAPLUS
- DN 127:5010
- ΤI 3-Spiroindolin-2-one derivatives as vasopressin and/or oxytocin receptor ligands
- Foulon, Loic; Garcia, Georges; Serradeil-Le Gal, Claudine; Valette, Gerard IN
- PASanofi, Fr.; Foulon, Loic; Garcia, Georges; Serradeil-Le Gal, Claudine;

Patel

Valette, Gerard

```
PCT Int. Appl., 72 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     French
FAN.CNT 1
                  KIND DATE APPLICATION NO. DATE
     PATENT NO.
                             _____
     ______
                       _____
     WO 9715556 A1 19970501 WO 1996-FR1666 19961024
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG
                                             FR 1995-12533 A 19951024
                                             FR 1995-12533
     FR 2740136
                       A1 19970425
                                                             19951024
                       B1
     FR 2740136
                             19980109
                                             TW 1996-85112955 19961022
     TW 474917
                       В
                             20020201
                                              FR 1995-12533 A 19951024
                A 20001230
                                             IN 1996-DE2288 19961023
     IN 185328
                                              FR 1995-12533 A 19951024
                   AA 19970501
                                             CA 1996-2235686 19961024
     CA 2235686
                                             FR 1995-12533 A 19951024
     AU 9673080
                      A1 19970515
                                             AU 1996-73080
                                                             19961024
     AU 715841
                       в2
                             20000210
                                             FR 1995-12533 A 19951024
                                             WO 1996-FR1666 W 19961024
     ZA 9608945 A 19970529
                                             ZA 1996-8945 19961024
                                             FR 1995-12533 A 19951024
                A1 19981028
                                             EP 1996-934967 19961024
     EP 873309
     EP 873309
                      B1 20021218
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI
                                              FR 1995-12533 A 19951024
                                             WO 1996-FR1666 W 19961024
     CN 1202886
                        Α
                             19981223
                                              CN 1996-198579 19961024
     CN 1106384
                        В
                             20030423
                                              FR 1995-12533 A 19951024
     BR 9611198
                           19990406
                                              BR 1996-11198 19961024
                                              FR 1995-12533 A 19951024
                                              WO 1996-FR1666 W 19961024
                                              JP 1996-516363 19961024
     JP 11509232
                        T2 19990817
                                              FR 1995-12533 A 19951024
                                              WO 1996-FR1666 W 19961024
     NZ 320352
                      Α
                             20000128
                                              NZ 1996-320352 19961024
                                              FR 1995-12533 A 19951024
                                              WO 1996-FR1666 W 19961024
                             20010527
                                              RU 1998-109945 19961024
     RU 2167864
                        C2
                                              FR 1995-12533 A 19951024
                                              WO 1996-FR1666 W 19961024
                                              JP 2001-75467
     JP 2001302631 A2
                             20011031
                                                             19961024
                                              FR 1995-12533 A 19951024
                                              JP 1997-516363 A319961024
                 B2
                                              JP 1997-516363 19961024
     JP 3274471
                             20020415
                                              FR 1995-12533 A 19951024
```

| 09951006.2 3 | | Page 73 | 3 |
|--------------|----|----------|---------------------------|
| IL 124002 | A1 | 20021110 | IL 1996-124002 19961024 |
| | | | FR 1995-12533 A 19951024 |
| | | | WO 1996-FR1666 W 19961024 |
| AT 229940 | E | 20030115 | AT 1996-934967 19961024 |
| | | | FR 1995-12533 A 19951024 |
| | | | WO 1996-FR1666 W 19961024 |
| ES 2191769 | Т3 | 20030916 | ES 1996-934967 19961024 |
| _ | | | FR 1995-12533 A 19951024 |
| US 5994350 | A | 19991130 | US 1998-51900 19980417 |
| | | | FR 1995-12533 A 19951024 |
| | | | WO 1996-FR1666 W 19961024 |
| NO 9801817 | А | 19980423 | NO 1998-1817 19980423 |
| | | | FR 1995-12533 A 19951024 |
| | | | WO 1996-FR1666 W 19961024 |
| HK 1016596 | A1 | 20030404 | HK 1999-101588 19990414 |
| | | | FR 1995-12533 A 19951024 |
| | | | WO 1996-FR1666 W 19961024 |
| US 6046341 | A | 20000404 | US 1999-417190 19991012 |
| | | | FR 1995-12533 A 19951024 |

OS MARPAT 127:5010

GΙ

$$R^1$$
 $Cy-OTZ$
 SO_2
 R^4
 R^3
 R^4
 R^4
 R^3
 R^4
 R^4
 R^3

AB Indolin-2-one derivs. I [W = CH2 or SO2; Cy = atoms to form spirocyclic (un)satd. non-arom. C3-12 hydrocarbon ring optionally fused or substituted by .gtoreq. 1 C1-7 alkyl or by C3-6 spirocycloalkyl; T = C1-4 alkylene optionally interrupted by C3-6 cycloalkylene, said alkylenes optionally substituted by C1-3 alkyl, or T = direct bond; Z = particularly amino; R1-R4 = H or substituents, e.g. halo, alkyl, etc.] and their salts are claimed. The compds. may be used in drugs having vasopressin and/or oxytocin receptor affinity. For example, 5-ethoxy-3-spiro[4-(2-

chloroethoxy)cyclohexane]indolin-2-one (mixed isomers, prepn. given) was treated with KOBu-tert and 4-(N-tert-butylcarbamoyl)-2-methoxybenzenesulfonyl chloride to give the corresponding 1-sulfonylated deriv., which then reacted with morpholine and NaI in DMF at 60.degree. to give 2 isomers of title compd. II. I had IC50 values of 10-5 to 10-9 M for inhibition of binding of tritiated arginine-vasopressin to rat mammary vasopressin receptors in vitro. Diuretic effects of I in rats showed them to be strong V2 antagonists.

```
L7 ANSWER 52 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 1997:287158 CAPLUS

DN 126:349686

TI Color photographic element containing yellow colored magenta masking coupler

IN Kapp, Daniel L.; Younathan, Janet N.; Ross, Robert J.; Merrill, James P.

PA Eastman Kodak Company, USA

SO U.S., 23 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| | | | | | |
| ΡI | US 5622818 | Α | 19970422 | US 1995-564515 | 19951129 |
| | | | | IIS 1995-564515 | 19951129 |

OS MARPAT 126:349686

AB A multilayer silver halide color photog. element comprising a support bearing a light-sensitive silver halide emulsion layer and a non-diffusible yellow-colored magenta masking coupler wherein the masking coupler is a 2'-hydroxy-5'-substituted-4-phenylazo-5-pyrazolone. The masking coupler has good coupling activity and desirable hues and can be obtained in good yields by simple syntheses.

- L7 ANSWER 53 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1996:596172 CAPLUS
- DN 125:247613
- TI Preparation of indolines as 5-HT2B/2C receptor antagonists
- IN Gaster, Laramie Mary; Wyman, Paul Adrian; Mulholland, Keith Raymond; Davies, David Thomas; Duckworth, David Malcom; Forbes, Ian Thomson; Jones, Graham Elgin
- PA Smithkline Beecham Plc, UK
- SO PCT Int. Appl., 79 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

| 11114. | C14 T | _ | | | | | | | | | | | | | | | | | |
|--------|------------|------|-----|-----|-----|------|------|------|-----|------|-------|-------|------|------|------|------|-----|-----|----|
| | PATENT NO. | | | KI. | ND | DATE | | | A | PPLI | CATI | ON NO | 0. | DATE | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| ΡI | WO | 9623 | 783 | | Α | 1 | 1996 | 8080 | | W | 0 19 | 96-E | P368 | | 1996 | 0126 | | | |
| | | W: | ΑL, | AM, | ΑT, | ΑU, | ΑZ, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CZ, | DE, | DK, | EE, | |
| | | | | | | | | | | | | | | | LK, | | | | |
| | | | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | |
| | | | SG, | SI | | | | | | | | | | | | | | | |
| | | RW: | ΚE, | LS, | MW, | SD, | SZ, | UG, | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IE, | |
| | | | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | ML, | MR, | NE |
| | | | | | | | | | | G) | B 19: | 95-2 | 052 | Α | 1995 | 0202 | | | |
| | | | | | | | | | | G) | B 19: | 95-83 | 327 | Ά | 1995 | 0425 | | | |

| | | | GB 1995-8967 A 19950503 |
|---|-------------------------|---|---|
| | | | GB 1995-16845 A 19950817 |
| | | | GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912 |
| CA 2212061 | AA | 19960808 | CA 1996-2212061 19960126 |
| 011 2212001 | 7111 | 13300000 | |
| | | | |
| | | | GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503 |
| | | | GB 1995-16845 A 19950817 |
| | | | GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912 |
| AU 9646646 | A 1 | 19960821 | AU 1996-46646 19960126 |
| AU 699727 | B2 | 19981210 | |
| | | | GB 1995-2052 A 19950202 |
| | | | GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503 |
| | | | GB 1995-16845 A 19950817 |
| | | | GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912 |
| | | | WO 1996-EP368 W 19960126 |
| BR 9607016 | A | 19971028 | |
| BR 3007010 | A | 199/1020 | |
| | | | GB 1995-2052 A 19950202 |
| | | | GB 1995-8327 A 19950425 |
| | | | GB 1995-8967 A 19950503 |
| | | | GB 1995-16845 A 19950817 |
| | | | GB 1995-17542 A 19950826 |
| | | | GB 1995-18574 A 19950912 |
| | | | WO 1006 ED260 W 10060106 |
| | | | WO 1996-EP368 W 19960126 |
| EP 808312 | A1 | 19971126 | EP 1996-902259 19960126 |
| EP 808312 | B1 | 20001102 | EP 1996-902259 19960126 |
| EP 808312 | B1 | 20001102 | EP 1996-902259 19960126 |
| EP 808312 | B1 | 20001102 | |
| EP 808312
R: AT, BE, | B1 | 20001102 | EP 1996-902259 19960126 |
| EP 808312
R: AT, BE, | B1 | 20001102 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, |
| EP 808312
R: AT, BE, | B1 | 20001102 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 |
| EP 808312
R: AT, BE, | B1 | 20001102 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 |
| EP 808312
R: AT, BE, | B1 | 20001102 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 |
| EP 808312
R: AT, BE, | B1 | 20001102 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 |
| EP 808312
R: AT, BE, | B1 | 20001102 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 |
| EP 808312
R: AT, BE, | B1 | 20001102 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 |
| EP 808312
R: AT, BE,
IE, SI | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 |
| EP 808312
R: AT, BE,
IE, SI | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-17542 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-2052 A 19950202 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950817 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950817 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8327 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-16845 A 19950826 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-523247 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950425 GB 1995-867 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950912 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 JP 10513442 | B1
CH, DE
A
T2 | 20001102
, DK, ES, 1
19980415
19981222 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8967 A 19950425 GB 1995-16845 A 19950826 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-523247 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950817 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 | B1
CH, DE | 20001102
, DK, ES, 1 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-16845 A 19950826 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-523247 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 RO 1997-1439 19960126 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 JP 10513442 | B1
CH, DE
A
T2 | 20001102
, DK, ES, 1
19980415
19981222 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 RO 1997-1439 19960126 GB 1995-2052 A 19950202 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 JP 10513442 | B1
CH, DE
A
T2 | 20001102
, DK, ES, 1
19980415
19981222 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-16845 A 19950826 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-523247 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950425 GB 1995-8327 A 19950425 GB 1995-16845 A 19950817 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 RO 1997-1439 19960126 RO 1997-1439 19960126 GB 1995-2052 A 19950202 GB 1995-2052 A 19950202 GB 1995-2052 A 19950202 GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 JP 10513442 | B1
CH, DE
A
T2 | 20001102
, DK, ES, 1
19980415
19981222 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8967 A 19950425 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950425 GB 1995-8967 A 19950817 GB 1995-17542 A 19950817 GB 1995-18574 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 RO 1997-1439 19960126 RO 1997-1439 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950503 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 JP 10513442 | B1
CH, DE
A
T2 | 20001102
, DK, ES, 1
19980415
19981222 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8967 A 19950425 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950425 GB 1995-8967 A 19950817 GB 1995-17542 A 19950817 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 GB 1995-18574 A 19950817 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 RO 1997-1439 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950503 GB 1995-8327 A 19950503 GB 1995-8327 A 19950503 GB 1995-8867 A 19950503 GB 1995-8867 A 19950503 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 JP 10513442 | B1
CH, DE
A
T2 | 20001102
, DK, ES, 1
19980415
19981222 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8967 A 19950503 GB 1995-16845 A 19950826 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950425 GB 1995-8967 A 19950817 GB 1995-17542 A 19950817 GB 1995-18574 A 19950817 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 RO 1997-1439 19960126 RO 1997-1439 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950425 GB 1995-8327 A 19950503 GB 1995-8327 A 19950503 GB 1995-8327 A 19950503 GB 1995-8327 A 19950425 GB 1995-8327 A 19950826 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 JP 10513442 | B1
CH, DE
A
T2 | 20001102
, DK, ES, 1
19980415
19981222 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8967 A 19950425 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950425 GB 1995-8967 A 19950817 GB 1995-17542 A 19950817 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 GB 1995-18574 A 19950817 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 RO 1997-1439 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950503 GB 1995-8327 A 19950503 GB 1995-8327 A 19950503 GB 1995-8867 A 19950503 GB 1995-8867 A 19950503 |
| EP 808312 R: AT, BE, IE, SI CN 1179156 JP 10513442 | B1
CH, DE
A
T2 | 20001102
, DK, ES, 1
19980415
19981222 | EP 1996-902259 19960126 FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, GB 1995-2052 A 19950202 GB 1995-8967 A 19950503 GB 1995-16845 A 19950826 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 CN 1996-192777 19960126 CN 1996-192777 19960126 GB 1995-2052 A 19950202 JP 1996-523247 19960126 GB 1995-8327 A 19950425 GB 1995-8967 A 19950817 GB 1995-17542 A 19950817 GB 1995-18574 A 19950817 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 RO 1997-1439 19960126 RO 1997-1439 19960126 GB 1995-8327 A 19950202 GB 1995-8327 A 19950425 GB 1995-8327 A 19950503 GB 1995-8327 A 19950503 GB 1995-8327 A 19950503 GB 1995-8327 A 19950425 GB 1995-8327 A 19950826 |

| AT | 197300 | E | 20001115 | АТ | 1996-902259 | | 19960126 |
|---------------|---------|------------|----------|------------|-------------|----|----------|
| | | | | | 1995-2052 | | 19950202 |
| | | | | | 1995-8327 | | 19950425 |
| | | | | | 1995-8967 | | 19950503 |
| | | | | | 1995-16845 | | 19950817 |
| | | | | | 1995-17542 | | |
| | | | | | | | 19950826 |
| | | | | | 1995-18574 | | 19950912 |
| 77.0 | 0151650 | m o | 00010101 | | 1996-EP368 | | 19960126 |
| FO | 2151652 | Т3 | 20010101 | | 1996-902259 | | 19960126 |
| | | | | | 1995-2052 | | 19950202 |
| | | | | | 1995-8327 | | 19950425 |
| | | | | | 1995-8967 | | 19950503 |
| | | | | | 1995-16845 | | 19950817 |
| | | | | | 1995-18574 | | 19950912 |
| PT | 808312 | ${f T}$ | 20010330 | | 1996-969022 | 59 | 19960126 |
| | | | | GB | 1995-2052 | Α | 19950202 |
| | | | | GB | 1995-8327 | Α | 19950425 |
| | | | | GB | 1995-8967 | Α | 19950503 |
| | | | | GB | 1995-16845 | Α | 19950817 |
| | | | | GB | 1995-17542 | Α | 19950826 |
| | | | | GB | 1995-18574 | Α | 19950912 |
| \mathtt{PL} | 184490 | В1 | 20021129 | $_{ m PL}$ | 1996-321706 | | 19960126 |
| | | | | GB | 1995-2052 | Α | 19950202 |
| | | | | GB | 1995-8327 | | 19950425 |
| | | | | GB | 1995-8967 | Α | 19950503 |
| | | | | GB | 1995-16845 | Α | 19950817 |
| | | | | GB | 1995-17542 | Α | 19950826 |
| | | | | GB | 1995-18574 | Α | 19950912 |
| | | | | WO | 1996-EP368 | W | 19960126 |
| z_{A} | 9600758 | A1 | 19970930 | z_{A} | 1996-758 | | 19960131 |
| | | | | GB | 1995-2052 | Α | 19950202 |
| IT | 116998 | A 1 | 20010808 | ${	t IL}$ | 1996-116998 | | 19960201 |
| | | | | GB | 1995-2052 | Α | 19950202 |
| | | | | GB | 1995-8327 | Α | 19950425 |
| | | | | GB | 1995-8967 | Α | 19950503 |
| | | | | | 1995-16845 | | 19950817 |
| | | | | | 1995-17542 | Α | 19950826 |
| | | | | | 1995-18574 | A | 19950912 |
| FI | 9703205 | A | 19971001 | | 1997-3205 | | 19970801 |
| | | | | | 1995-2052 | | 19950202 |
| | | | | | 1995-8327 | Α | 19950425 |
| | | | | | 1995-8967 | | 19950503 |
| | | | | | 1995-16845 | Α | 19950817 |
| | | | | | 1995-17542 | A | 19950826 |
| | | | | | 1995-18574 | Α | 19950912 |
| | | | | | 1996-EP368 | W | 19960126 |
| NO | 9703543 | A | 19971001 | NO | 1997-3543 | | 19970801 |
| | | | | | 1995-2052 | | 19950202 |
| | | | | | 1995-8327 | Α | 19950425 |
| | | | | | 1995-8967 | Α | 19950503 |
| | | | | | 1995-16845 | | 19950817 |
| | | | | | 1995-17542 | Α | 19950826 |
| | | | | | 1995~18574 | | 19950912 |
| | F | | | | 1996-EP368 | W | 19960126 |
| US | 5990133 | A | 19991123 | | 1997-875506 | | 19971016 |
| | | | | | 1995-2052 | | 19950202 |
| | | | | GB | 1995-8327 | A | 19950425 |
| | | | | | | | |

| НК 1003883 | A1 | 20010831 | GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 HK 1998-103018 19980409 GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 |
|-----------------------------|----------|----------------------|---|
| US 6235758 | B1 | 20010522 | GB 1995-18574 A 19950912
WO 1996-EP368 W 19960126
US 1999-359606 19990723
GB 1995-2052 A 19950202
GB 1995-8327 A 19950425
GB 1995-8967 A 19950503 |
| US 2003105139
US 6638953 | A1
B2 | 20030605
20031028 | GB 1995-16845 A 19950817
GB 1995-17542 A 19950826
GB 1995-18574 A 19950912
WO 1996-EP368 W 19960126
US 1997-875506 A319971016
US 2001-767245 20010122 |
| | 22 | 20031020 | GB 1995-2052 A 19950202 GB 1995-8327 A 19950425 GB 1995-8967 A 19950503 GB 1995-16845 A 19950817 GB 1995-17542 A 19950826 GB 1995-18574 A 19950912 WO 1996-EP368 W 19960126 US 1997-875506 A319971016 US 1999-359606 A319990723 |

OS CASREACT 125:247613; MARPAT 125:247613

The title compds. [I; P1, P2 = Ph, arom. or partially satd. monocyclic or bicyclic heterocyclic ring; A = bond, (substituted) C1-5 alkylene, etc.; R1, R2 = H, (substituted) C1-6 alkyl, C2-6 alkenyl, etc.; R3 = H, C1-6 alkyl; R4 = 1-indolinyl, etc.; n, m = 0-2], useful in the treatment of CNS disorders such as anxiety, were prepd. Thus, treatment of 3-(3-pyridyl)aniline with 1,1-dicarbonyldiimidazole in CH2C12 followed by

Patel

reaction of the intermediate with 5-methoxy-6-trifluoromethylindoline in DMF afforded 85% the indoline II which showed pKi of 5.8-9.7 against [3H]-mesulergine binding to rat or human 5-HT2C clones expressed in 293 cells in vitro.

```
L7
     ANSWER 54 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     1996:467112 CAPLUS
DN
     125:114503
ΤI
     Substituted 2-acylamino-pyridines as inhibitors of nitric oxide synthase
IN
     Guthikonda, Ravindra K.; Hagmann, William K.; Maccoss, Malcolm; Shah,
     Shrenik K.; Durette, Philippe L.
PA
     Merck and Co., Inc., USA
SO
     PCT Int. Appl., 79 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                       APPLICATION NO. DATE
                     ____
                           -----
                                         ______
     WO 9618617 A1 19960620 WO 1995-US16158 19951208
PI
        W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP,
            KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO,
            RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
            IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
            NE, SN, TD, TG
                                         US 1994-353859
                                                          19941212
    AU 9645158
                      A1
                           19960703
                                         AU 1996-45158
                                                          19951208
                                         US 1994-353859
                                                         19941212
                                         WO 1995-US16158 19951208
    US 5908842
                      Α
                           19990601
                                         US 1997-836863
                                                         19970520
                                         WO 1995-US16158 19951208
OS
    MARPAT 125:114503
    Substituted 2-acylaminopyridine compds. and pharmaceutically acceptable
AΒ
     salts were prepd. which were found useful in the treatment of nitric oxide
    synthase mediated diseases and disorders.
    ANSWER 55 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
Ь7
AN
    1996:446514 CAPLUS
DN
    125:114487
TI
    CNS-Active pyridinylurea derivatives
IN
    Forbes, Ian Thomson; Jones, Graham Elgin
PA
    Smithkline Beecham P.L.C., UK
    PCT Int. Appl., 24 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LΑ
    English
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                       APPLICATION NO. DATE
                          _____
                                        PI
    WO 9611930
                     A1 19960425
                                        WO 1995-EP3944 19951005
        W: JP, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                         GB 1994-20999 A 19941018
    EP 788499
                      A1
                          19970813
                                         EP 1995-934135
                                                         19951005
        R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE
                                         GB 1994-20999 A 19941018
```

| | | | | WO | 1995-EP3944 | W | 19951005 |
|----|-------------------|----|----------|----|-------------|---|----------|
| | JP 10508584 | Т2 | 19980825 | JΡ | 1995-512907 | | 19951005 |
| | | | | GB | 1994-20999 | A | 19941018 |
| | | | | WO | 1995-EP3944 | W | 19951005 |
| | US 5866586 | А | 19990202 | US | 1997-817580 | | 19970417 |
| | | | | GB | 1994-20999 | Α | 19941018 |
| | | | | WO | 1995-EP3944 | W | 19951005 |
| OS | MARPAT 125:114487 | | | | | | |

GI MARPAT 125:114487

$$Q^{1=} R^{6} \xrightarrow{R^{7} R^{7}} R^{6}$$

$$Y \xrightarrow{R^{5}} R^{4} \qquad Q^{2=} \xrightarrow{R^{8}} X \xrightarrow{R^{4}} R^{5}$$

$$Y \xrightarrow{R^{5}} R^{5} \qquad Y \xrightarrow{R^{5}} R^{5}$$

AΒ The invention relates to heterocyclic compds. R1-G-N(R2)-CO-R3 [I; G=Phring, quinoline or isoquinoline nucleus, or a 5- or 6-membered arom. heterocycle contg. 1-3 heteroatoms (N, O, and/or S); R1 = H, alkyl, alkylthio, cyano, NO2, halo, CF3, amino, etc.; R2 = H, alkyl; R3 = group Q1 or Q2; X = Y = N, or one of X and Y = N and the other = C or CH; R4, R5 = alkyl, alkoxy, OH, halo, NO2, (un) substituted Ph, etc.; or R4R5 forms (un) substituted 5-membered carbo- or heterocyclic ring; R6, R7, R8 = H, alkyl]. Compds. I are 5-HT2C receptor antagonists, and some or all of them are also 5-HT2B antagonists. They are useful in the treatment of a variety of CNS and GI disorders. For example, 5,6-dichloronicotinic acid underwent sulfurization in the 6-position by thiourea (87%) and S,O-dimethylation with MeI (50%) to give Me 3-chloro-2-(methylthio)pyridine-5-carboxylate. This was converted to the corresponding hydrazide (32%) and then the carbonyl azide (72%). The latter was decompd. in refluxing PhMe, and the intermediate isocyanate treated with 3-aminopyridine, to give 85% title compd. II. The three example compds. had pKi of 7.4-8.1 in a test for displacement of [3H]-mesulergine from rat or human 5-HT2C clones, expressed in 293 cells in vitro.

- L7 ANSWER 56 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1996:380210 CAPLUS
- DN 125:114681
- TI Pyrimidine derivatives and processes for the preparation thereof
- IN Zimmermann, Juerg
- PA Ciba-Geigy Corporation, USA

| SO
DT | CODEN: USXXAM | Contin | -part of U.S | S. Ser. No. 42,322, abandoned. | |
|-------------|---------------------------------|----------|----------------------|---|----------|
| LA | English
CNT 3 | | | | |
| ran. | | KIND | DATE | APPLICATION NO. DATE | |
| PI | | | | US 1994-234889 19940428
CH 1992-1083 A 19920403
US 1993-42322 B219930402
CH 1993-2966 A 19931001 | |
| | CA 2148477 | | 19950413 | CA 1994-2148477 19940921
CH 1993-2966 A 19931001 | |
| PATE
FAN | NT FAMILY INFORM
1994:107056 | | | | |
| | PATENT NO. | KIND | DATE | APPLICATION NO. DATE | |
| PI | EP 564409 | B1 | 20000119 | EP 1993-810219 19930325 | |
| | | | | CH 1992-1083 A 19920403 | 3E |
| | AT 188964 | E | 20000215 | AT 1993-810219 19930325
CH 1992-1083 A 19920403 | |
| | ES 2142857 | Т3 | 20000501 | ES 1993-810219 19930325
CH 1992-1083 A 19920403 | |
| | | AA
C | 19931004
20021126 | | |
| | CZ 283944 | В6 | 19980715 | CH 1992-1083 A 19920403
CZ 1993-560 19930401 | |
| | RU 2125992 | C1 | 19990210 | CH 1992-1083 A 19920403
RU 1993-5357 19930401 | |
| | IL 105264 | A1 | 19990411 | | |
| | SK 280620 | В6 | 20000516 | CH 1992-1083 A 19920403
SK 1993-280 19930401 | |
| | NO 9301283 | Α | 19931004 | | |
| | ZA 9302397 | Α | 19931004 | CH 1992-1083 A 19920403
ZA 1993-2397 19930402 | |
| | AU 9335694
AU 666709 | A1
B2 | 19931007
19960222 | CH 1992-1083 A 19920403
AU 1993-35694 19930402 | |
| | CN 1077713 | A | 19931027 | CH 1992-1083 A 19920403
CN 1993-103566 19930402 | |
| | CN 1043531 | В | 19990602 | | |
| | HU 64050 | A2 | 19931129 | CH 1992-1083 A 19920403
HU 1993-982 19930402 | |
| | JP 06087834
JP 2706682 | | 19940329
19980128 | CH 1992-1083 A 19920403
JP 1993-78096 19930405 | |
| FAN | 1995:735375 | KIND | | CH 1992-1083 A 19920403 APPLICATION NO. DATE | |
| ΡΙ | wo 9509852 |
A1 | 19950413 | WO 1994-EP3149 19940921 | |
| | W: AM, AU, | BB, BG, | BR, BY, CA, | CN, CZ, EE, FI, GE, HU, JP, KG, K
MG, MN, NO, NZ, PL, RO, RU, SI, S | Р,
К, |

| | RW: | KE, | MW,
NL, | UA,
SD,
PT, | SZ, | ΑT, | BE,
BJ, | CH, | DE,
CG, | DK,
CI, | ES,
CM, | FR,
GA, | GB, | , GR,
, ML, | IE,
MR, | IT,
NE, | LU,
SN, | |
|------------|--------|----------------|------------|-------------------|----------------|----------------|------------|-----|------------|------------|-------------------|------------|-----------|----------------|------------|------------|------------|-----|
| | | | | | | | | | CI | I 199 | 93-2 | 966 | Α | 1993 | 1001 | | | |
| | | | | | | | | | CI | i 199 | 94-22 | 278 | Α | 1994 | 0718 | | | |
| US | 5543 | 520 | | Α | | 1996 | 0806 | | | | | 06333 | | 1994 | | | | |
| | | | | | | | | | | | | | | 1993 | | | | |
| G 3 | 0140 | 477 | | | | 1005 | | | | | | | | 1994 | | | | |
| CA | 21484 | 4 / / | | A | 1 . | 19950 |)413 | | | | | | | 1994 | | | | |
| 7) 1 7 | 94769 | 775 | | 7.1 | | 1005 | 2501 | | | | | | | 1993 | | | | |
| | 69380 | | | A1
B2 | | 1995(
1998(| | | A | 1 199 | 94-76 | 6975 | | 1994 | 0921 | | | |
| AU | 09300 | J 1 | | DZ | | 1990(| 1109 | | CI | 1 100 |) 2 2 C | 366 | ~ | 1000 | 1001 | | | |
| | | | | | | | | | | | | | | 1993
1994 | | | | |
| | | | | | | | | | | | | | | 1994 | | | | |
| EP | 67204 | 10 | | A 1 | | 19950 | 920 | | | | | | | 1994 | | | | |
| | | | | | | | | | GB. | GR. | TE. | . тт. | ,
T.T. | LU, | MC | MT. | DФ | C F |
| | | | • | • | • | • | | , | CH | 199 | $\frac{-2}{3-29}$ | 966 | Α, | 1993 | 1001 | иш, | , | בנט |
| | | | | | | | | | | | | | | 1994 | | | | |
| | | | | | | | | | | | | | | 1994 | | | | |
| JP | 08504 | 1834 | | T2 | : : | 19960 | 528 | | JF | 199 | 4-51 | 10576 | 5 | 1994 | 0921 | | | |
| | | | | | | | | | | | | | | 1993 | | | | |
| | | | | | | | | | | | | | | 1994 | | | | |
| MAF | RPAT 1 | .25:1 | .1468 | 31 | | | | | WC | 199 | 4-EF | 3149 | W | 1994 | 0921 | | | |

There are described N-phenyl-2-pyrimidine-amine derivs. (I) wherein R1 is 4-pyrazinyl, 1-methyl-1H-pyrrolyl, amino- or amino-lower alkyl-substituted Ph wherein the amino group in each case is free, alkylated or acylated, 1H-indolyl or 1H-imidazolyl bonded at a five-membered ring carbon atom, or unsubstituted or lower alkyl-substituted pyridyl bonded at a ring carbon atom and unsubstituted or substituted at the nitrogen atom by oxygen; R2 and R3 are hydrogen or lower alkyl; one or two of R4, R5, R6, R7 are each nitro, fluoro-substituted lower alkoxy or -N(R9)C(:X)(Y)nR10. These compds. can be used, for example, in the therapy of tumoral diseases. Three example formulations are given.

- L7 ANSWER 57 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1996:228503 CAPLUS
- DN 124:261021
- TI Six-membered nitrogen-containing heteroaryl oxazolidinones useful as antibacterials

OS GI

Riedl, Bernd; Haebich, Dieter; Stolle, Andreas; Wild, Hanno; Endermann, Rainer; Bremm, Klaus Dieter; Kroll, Hein-Peter; Labischinski, Harald; Schaller, Klaus; Werling, Hans-Otto PA Bayer A.-G., Germany SO Eur. Pat. Appl., 99 pp. CODEN: EPXXDW DT Patent LAGerman FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ~ - - -EP 1995-110624 19950707 PΙ EP 694543 A1 19960131 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE DE 1994-4425612A 19940720 DE 4425612 Α1 19960404 DE 1994-4425612 19940720 AU 9524985 Α1 19960201 AU 1995-24985 19950713 AU 699940 В2 19981217 DE 1994-4425612A 19940720 RO 115262 В1 19991230 RO 1995-1312 19950714 DE 1994-4425612A 19940720 CA 2154025 AΑ 19960121 CA 1995-2154025 19950717 DE 1994-4425612A 19940720 JP 08041056 A2 19960213 JP 1995-201799 19950717 DE 1994-4425612A 19940720 US 5627181 A 19970506 US 1995-503369 19950717 DE 1994-4425612A 19940720 IL 114626 **A**1 19990817 IL 1995-114626 19950717 DE 1994-4425612A 19940720 FI 9503477 Α 19960121 FI 1995-3477 19950718 DE 1994-4425612A 19940720 NO 9502865 Α 19960122 NO 1995-2865 19950719 DE 1994-4425612A 19940720 ZA 9506018 Α 19960313 ZA 1995-6018 19950719 DE 1994-4425612A 19940720 HU 75035 A2 19970328 HU 1995-2173 19950719 DE 1994-4425612A 19940720 CN 1119647 A 19960403 CN 1995-107584 19950720

OS MARPAT 124:261021

US 5843967

Α

19981201

GI

DE 1994-4425612A 19940720

US 1996-749581 19961115 DE 1994-4425612A 19940720 US 1995-503369 A119950717

The title compds. I are prepd. [in which R1 = N3, OH, OR2, OSO2R3, NR4R5; R2 = acyl, protecting group; R3 = alkyl, Ph, alkylphenyl; R4, R5 = cycloalkyl, H, Ph, alkyl, protecting group, COR6; R6 = cycloalkyl, alkyl, Ph, H; D = [all optionally substituted] C-bound, 6-membered, arom., N-contg. heterocyclyl; or 6-membered-ring-contg. bi- or tricyclic arom. N-contg. heterocyclyl; or .beta.-carbolin-3-yl; or indolizinyl]. For example, cyclization of 5-bromo-2-isocyanatopyridine-HCl with (R)-glycidyl butyrate in the presence of Bu3P:O in xylene gave 26% title compd. II. This was subjected to a sequence of ester methanolysis (69%), conversion of the resulting alc. to a mesylate (95%), then to an azide (95%), and then to an amine (85%), N-acetylation of the amine (98%), and PdO-catalyzed coupling with 4-MeC6H4B(OH)2 (60%), to give title compd. III [R = Me]. The analogously prepd. compd. III [R = H] had MIC of 0.5-1 .mu.g/mL against 4 strains of Staphylococcus.

```
L7 ANSWER 58 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 1996:214745 CAPLUS

DN 124:289261

TI Preparation of 4-(2-phenylethyl)pyridine derivatives as phosphodiesterase IV inhibitors

IN Warrellow, Graham John; Boyd, Ewan Campbell; Alexander, Rikki Peter

PA Celltech Therapeutics Ltd., UK

SO PCT Int. Appl., 83 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | LU,
SN, | MC,
TD, | NL,
TG | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA | , G | N, | ML, | MR, | NE, | |
|-----|------------|------------|-----------|------------|-------|------|-----|-----|------|-------|-------|----|-----|-----|--------------|-----|-----|----|
| | • | , | | | | | | GF | 3 19 | 94-12 | 2384 | Δ | 19 | 941 | 0621 | | | |
| | | | | | | | | | | 94-12 | | | | | 0621 | | | |
| | | | | | | | | | | 94-12 | | | | | 0622 | | | |
| | | | | | | | | | | 94-1 | | | | | 0805 | | | |
| US | 6245774 | | В: | 1 : | 20010 | 0612 | | | | | 92855 | | | | 0620 | | | |
| | | | | | | | | | | 94-12 | | | | | 0621 | | | |
| | | | | | | | | | | 94-12 | | | | | 0621 | | | |
| | | | | | | | | | | 94-12 | | | | | 0622 | | | |
| | | | | | | | | GE | 19 | 94-15 | 5836 | | | | 0805 | | | |
| CA | 2192645 | | A. | <i>A</i> : | 19951 | 228 | | | | | L9264 | | | | 0621 | | | |
| | | | | | | | | | | 94-12 | | | | | 0621 | | | |
| | | | | | | | | | | 94-12 | | Α | 199 | 940 | 0621 | | | |
| | | | | | | | | | | 94-12 | | Α | 199 | 940 | 0622 | | | |
| | | | | | | | | GE | 199 | 94-15 | 836 | Α | 199 | 940 | 0805 | | | |
| | 9527463 | | A] | | L9960 | 115 | | ΑU | 199 | 95-27 | 1463 | | 199 | 950 | 0621 | | | |
| AU | 707717 | | В2 | 2 [| 19990 | 715 | | | | | | | | | | | | |
| | | | | | | | | | | | 2384 | | | | 621 | | | |
| | | | | | | | | | | 94-12 | | | | | 621 | | | |
| | | | | | | | | | | 4-12 | | | | | 622 | | | |
| | | | | | | | | | | 4-15 | | | | | 805 | | | |
| מים | 766669 | | 70.11 | . 1 | 0070 | 100 | | | | | 31461 | | | | | | | |
| EP | | DE | A] | _ | .9970 | | | | | | 2635 | | 199 | 950 | 621 | | | |
| | R: AI, | DE, | Cn, | DE, | DK, | ES, | FK, | GB, | | | | | | | | NL, | PT, | SE |
| | | | | | | | | | | | 384 | | | | 621 | | | |
| | | | | | | | | | | 94-12 | 386 | | | | | | | |
| | | | | | | | | | | 94-12 | | | | |)622
)805 | | | |
| | | | | | | | | | | | 31461 | | | | | | | |
| JP | 10503174 | | Т2 | 2 1 | .9980 | 324 | | | | | 1845 | | | | 621 | | | |
| | | | | | | | | | | | 384 | | | | 621 | | | |
| | | | | | | | | | | | 386 | | | | 621 | | | |
| | | | | | | | | | | 4-12 | | | | | 622 | | | |
| | | | | | | | | | | 4-15 | | | | | 805 | | | |
| | | | | | | | | WO | 199 | 5-GB | 1461 | | | | | | | |
| US | 200214301 | .1 | A1 | . 2 | 0021 | 003 | | US | 200 | 1-80 | 5842 | | 200 | 10 | 314 | | | |
| | | | | | | | | GB | 199 | 4-12 | 384 | Α | 199 | 40 | 621 | | | |
| | | | | | | | | GB | 199 | 4-12 | 386 | | | | | | | |
| | | | | | | | | | | | 493 | | 199 | 40 | 622 | | | |
| | | | | | | | | | | | 836 | | 199 | | | | | |
| | | | | | | | | US | 199 | 5-49 | 2855 | A3 | 199 | 50 | 620 | | | |
| MAR | PAT 124:2 | 8926 | ıΤ | | | | | | | | | | | | | | | |

OS GI

AB Title compds. I [W = C(OMe), C(halo), N, etc.; L = (substituted) alkenyl, alkyl, aryloxy, etc.; Z = (substituted) alkenyl, alkyl, aryl, heterocycloalkyl, etc.], useful in the prophylaxis and treatment of

asthma, were prepd. Treatment of (R)-I [W = C(OMe); L = OH; Z = RCH2CH(Ph) wherein R = 4-pyridinyl] with t-BuOK in THF/DMF followed by addn. of PhCH2Br afforded (R)-I [W = C(OMe); L = OCH2Ph; Z = RCH2CH(Ph)]. Compds. I showed a concn.-dependent inhibition of recombinant PDE IV at 0.1-1000 nM with little or no activity against PDE I, II, III or V at concns. up to 100 .mu.M.

```
L7
    ANSWER 59 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
ΆN
    1995:851671 CAPLUS
DN
     123:256505
    Amidine derivatives with nitric oxide synthetase activities
TI
     Gentile, Robert James; Murray, Robert John; MacDonald, James Edwin;
     Shakespeare, William Calvin
PA
     Fisons Corp., UK; Fisons PLC
SO
    PCT Int. Appl., 103 pp.
    CODEN: PIXXD2
DT
    Patent
LΑ
    English
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                        APPLICATION NO. DATE
                                         -----
                          19950223 WO 1994-GB1767 19940812
    WO 9505363 A1
PI
        W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB,
            GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW,
            NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN
        RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC,
            NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
                                          GB 1993-16806 A 19930812
                                          GB 1993-19835 A 19930925
                                          GB 1993-25410 A 19931211
                                          GB 1994-1580 A 19940127
                                          GB 1994-11700 A 19940610
    CA 2169280
                      AΑ
                           19950223
                                          CA 1994-2169280 19940812
                                          GB 1993-16806 A 19930812
                                          GB 1993-19835 A 19930925
                                          GB 1993-25410 A 19931211
                                          GB 1994-1580
                                                        A 19940127
                                          GB 1994-11700 A 19940610
    AU 9473875
                      A1
                           19950314
                                         AU 1994-73875
                                                          19940812
    AU 682381
                      В2
                           19971002
                                          GB 1993-16806 A 19930812
                                         GB 1993-19835 A 19930925
                                         GB 1993-25410 A 19931211
                                         GB 1994-1580 A 19940127
GB 1994-11700 A 19940610
                                          WO 1994-GB1767 W 19940812
    ZA 9406095
                      Α
                           19950419
                                         ZA 1994-6095
                                                          19940812
                                         GB 1993-16806 A 19930812
    EP 713483
                      A1
                           19960529
                                         EP 1994-923776 19940812
    EP 713483
                      В1
                          20030115
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                         GB 1993-16806 A 19930812
                                         GB 1993-19835 A 19930925
                                         GB 1993-25410 A 19931211
                                         GB 1994-1580
                                                       A 19940127
                                         GB 1994-11700 A 19940610
                                         WO 1994-GB1767 W 19940812
```

| | 1132505 | A | 19961002 | CN | 1994-193688 | } | 19940812 |
|---------------|---------------------------------------|------------|----------|----|---------------------------|----|----------------------|
| CN | 1071746 | В | 20010926 | | | | |
| | | | | | 1993-16806 | | . 19930812 |
| RD | 9407515 | 75. | 10070107 | | 1993-19835 | Α | 19930925 |
| DK | 9407313 | A | 19970107 | | 1994-7515
1993-16806 | 70 | 19940812 |
| | | | | GB | | | 19930812 |
| | | | | | 1993-19833 | | 19930925
19931211 |
| | | | | | 1994-1580 | | 19931211 |
| | | | | | 1994-11700 | | 19940610 |
| | | | | WO | | | 19940812 |
| JP | 09501918 | T 2 | 19970225 | JP | | | 19940812 |
| | | | | GB | 1993-16806 | Α | 19930812 |
| | | | | GB | 1993-19835 | Α | 19930925 |
| | | | | GB | 1993-25410 | | 19931211 |
| | | | | | 1994-1580 | Α | 19940127 |
| | | | | | 1994-11700 | | 19940610 |
| TTT 7 | 75076 | 7.0 | 10000000 | | 1994-GB1767 | W | 19940812 |
| HU | 75876 | A2 | 19970528 | | 1996-310 | _ | 19940812 |
| | | | | | 1993-16806 | | 19930812 |
| | | | | | 1993-19835
1993-25410 | | 19930925
19931211 |
| | | | | | 1994-1580 | | 19931211 |
| | | | | | 1994-11700 | | 19940610 |
| $_{ m IL}$ | 110643 | A1 | 19980715 | | 1994-110643 | 11 | 19940812 |
| | | | | | 1993-16806 | Α | 19930812 |
| | | | | GB | 1993-19835 | | 19930925 |
| | | | | | 1993-25410 | Α | 19931211 |
| | | | | | 1994-1580 | | 19940127 |
| DII | 0100017 | ~ 1 | 10000510 | | 1994-11700 | A | 19940610 |
| RU | 2130017 | C1 | 19990510 | | 1996-104356 | _ | 19940812 |
| | | | | | 1993-16806
1993-19835 | | 19930812 |
| | | | | | 1993-19835 | | 19930925
19931211 |
| | | | | | 1994-1580 | | 19940127 |
| | | | | | 1994-11700 | | 19940610 |
| | | | | | 1994-GB1767 | | 19940812 |
| \mathtt{PL} | 180081 | В1 | 20001229 | PL | 1994-312961 | | 19940812 |
| | | | | | 1993-16806 | | 19930812 |
| | | | | | 1993-19835 | | 19930925 |
| | | | | | 1993-25410 | | 19931211 |
| | | | | | 1994-1580 | | 19940127 |
| | | | | | 1994-11700
1994-GB1767 | | 19940610 |
| AΤ | 231126 | E | 20030215 | | 1994-923776 | VV | 19940812 |
| | | | 2000120 | | 1993-16806 | Ά | 19930812 |
| | | | | | 1993-19835 | | 19930925 |
| | | | | | 1993-25410 | | 19931211 |
| | | | | GB | 1994-1580 | Α | 19940127 |
| | | | | | 1994-11700 | | 19940610 |
| 770 | E00700F | Th. | 10000015 | | 1994-GB1767 | W | 19940812 |
| U.S | 5807885 | A | 19980915 | | 1996-586761 | | 19960130 |
| NΩ | 9600534 | A | 19960411 | | | W | 19940812 |
| 140 | J J J J J J J J J J J J J J J J J J J | A | T))004TT | | 1996-534
1993-16806 | א | 19960209
19930812 |
| | | | | | 1993-16806 | | 19930812 |
| | | | | | 1993-25410 | | 19930923 |
| | | | | | | | |

| | | | | GB | 1994-1580 | A 19940127 |
|----|-------------------|---|----------|----|-------------|------------|
| | | | | GB | 1994-11700 | A 19940610 |
| | | | | WO | 1994-GB1767 | W 19940812 |
| | FI 9600628 | A | 19960212 | FΊ | 1996-628 | 19960212 |
| | | | | GB | 1993-16806 | A 19930812 |
| | | | | GB | 1993-19835 | A 19930925 |
| | | | | GB | 1993-25410 | A 19931211 |
| | | | | GB | 1994-1580 | A 19940127 |
| | | | | GB | 1994-11700 | A 19940610 |
| | | | | WO | 1994-GB1767 | W 19940812 |
| | US 6030985 | A | 20000229 | US | 1998-111926 | 19980708 |
| | | | | GB | 1993-16806 | A 19930812 |
| | | | | GB | 1993-19835 | A 19930925 |
| | | | | GB | 1993-25410 | A 19931211 |
| | | | | GB | 1994-1580 | A 19940127 |
| | | | | GB | 1994-11700 | A 19940610 |
| OS | MARPAT 123:256505 | | | | | |
| GI | | | | | | |

$$\mathbb{R}^{1}$$
 \mathbb{N} \mathbb{N}^{1} \mathbb{N}^{1} \mathbb{N}^{1} \mathbb{N}^{1} \mathbb{N}^{1} \mathbb{N}^{1}

AΒ Title compds. I [D = Ph, pyridinyl, 5-membered heterocyclic arom. ring contg. 1-4 O, S and/or N atoms, or perfluoroalkyl, with 1st 3 groups optionally substituted by alkyl, alkoxy, halo, and/or perfluoroalkyl; R1 = H, alkyl, halo; R2 = X(CH2)nZCONR3R4, X(CH2)nNHCO(CH2)sNR3R4, X(CH2) pNR3R4, X(CH2) nNHCOR5, or (CH2) qNHC(:NH)R6; X = 0, bond; Z = 0, NR7, bond; R3, R4 = H, alkyl, (CH2)rA, (CH2)mOA, CHMe(CH2)tA; or NR3R4 = 1-indanyl (sic), piperonylamino, piperidinyl, morpholinyl, pyrrolidinyl, 1,2,3,4-tetrahydroisoquinolinyl, (4-alkyl)piperazinyl; R5 = alkyl, perfluoroalkyl, (CH2)rA, O(CH2)wA; A = (un)substituted Ph, pyridinyl, pyrimidinyl, 5-membered heteroaryl; R6 = (un)substituted Ph, pyridinyl, 5-membered heteroaryl, perfluoroalkyl; R7 = H, alkyl; n, r = 0-6; p, w = 1-5; m = 2-5; q, t = 0-5; s = 1-3; 8 addnl. provisos] and pharmaceutically acceptable salts are described, together with processes for their prepn. and compns. contg. them. I have nitric oxide synthetase (II) inhibitory activity, and are potentially useful for treatment of neurodegenerative disorders, migraine, tolerance to opiates and diazepines, and drug addiction. For example, 4-nitrophenethylamine-HCl underwent N-trifluoroacetylation (80%), N-benzylation using NaH and PhCH2Br in THF (44%), hydrogenation of the nitro group over Pd/C (used directly), and condensation of the resultant amine with S-methyl-2thiophenethiocarboximide hydriodide and simultaneous hydrolysis of the amide (34%) to give title compd. III. In a screen for activity against a neuronal isoform of II, III showed an IC50 of < 10 .mu.M, indicating therapeutic utility. III also showed > 10-fold less potency against macrophage and endothelial isoforms of II, indicating desirable selectivity. Approx. 250 specific I and salts were prepd. and/or claimed, and 72 synthetic examples are given.

```
L7 ANSWER 60 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN AN 1995:305146 CAPLUS
```

DN 122:80891

TI Preparation of arylurea and amide derivatives and their use in the control of cell membrane potassium channels

IN Olesen, Soeren-Peter; Moldt, Peter; Pedersen, Ove

PA Neurosearch A/S, Den.

SO PCT Int. Appl., 56 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| PAN. | .CNT
PA' | I
TENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON N | ο. | DATE | | | | |
|------|-------------|--------------|-----------|-------|----------|--------|--------------|------|-----|------------|----------------|-------------------------|-------------|------------|-------------------------|--------------|---------|-------|------------|
| PI | WO | 9422
W: | ΑU, | BB, | BG, | BR, | BY, | CA, | CN, | CZ, | FI, | HU, | JP, | KP, | KR, | KZ, | LK, | LV, | |
| | | RW: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB,
GN, | GR,
ML, | IE,
MR, | IT,
NE, | LU,
SN, | UZ,
MC,
TD, | NL,
TG | PT, | SE, | |
| | CA | 2160 | 128 | | A | Ą | 1994 | 1013 | | C | A 19 | 94-2 | 1601 | 28 | 1993
1994
1993 | 0330 | | | |
| | | 9465
6836 | 378
54 | | A:
B2 | 1
2 | 1994
1997 | | | A | ປ 19 | 94-6 | 5378 | | 1994 | 0330 | | | |
| | | | | | | _ | | | | W | 19 | 94-E | P100 | 8 | 1993
1994 | 0330 | | | |
| | EP
EP | 6930
6930 | 53 | | B | l | 1999 | 0120 | | | | | | | | | | D.III | a = |
| | | | | | | | | | | DI
Wo | X 199
0 199 | 93-41
94-E1 | 11
P1008 | 8 | LU,
19930
19940 | 0407 | NL, | PT, | SE |
| | JP | 0851 | 0448 | | T2 | 2 | 1996: | 1105 | | DI | X 199 | 93-4 | 11 | | 19940
19930
19940 | 0407 | | | |
| | AT | 1759 | 55 | | E | | 19990 | 0215 | | A' | r 199 | 94-9: | 13095 | 5 | 1994(
1993(| 0330 | | | |
| | FI | 9504 | 746 | | Α | | 1995: | 1117 | | F]
Di | [199
[199 | 95-47
9 3- 41 | | | 19951
19930
19940 | L005
0407 | | | |
| | NO | 95039 | 956 | | A | | 19951 | L207 | | NC
DF | 199
(199 | 95-39
93-41 | 956
L1 | | 19951
1993(
1994(| L005
0407 | | | |
| | US | 5696 | 138 | | A | | 19971 | L209 | | US
DF | 3 199
3 199 | 95-53
93-41 | 35267
11 | 7 | 19951
1993(
1994(| L227 | | | |
| 06 | MAT | ייח אכוני | 122.0 | 20001 | , | | | | | *** | - 10- | , | | , | エンフせい | ,330 | | | |

R11

HO

R1

$$D-R^2$$
 R^{12}

A

 R^4
 R^3
 R^3
 R^4

MARPAT 122:80891

Patel

os

GI

AΒ Title compds. I (X, Z = HN, H2C, at least one of X and Z being HN; Y = O,S, NCN, HN; B, D, E, F = C, N, at least 3 of B, D, E, and F being C; R1, R4 = H, halo, F3C, HO2C, alkyl-O2C, aryl-O2C, H2NCO, NC, alky, alkoxy, HO, etc.; R2 = H, F3C, HO2C NC, HOCH2, aryloxy, etc.; R3 = H, halo, HO2C, NC, alkylcarbonyl, etc.; R2R3, R3R4 with the Cs to which they are attached form an (unsatd.) addnl. fused carbocyclyl; one of R11, R12 = halo, F3C, HO2C, NC, alkyl, aloxy HO, O2N, HOCH2, etc. and the other is H; A = H, AR12 and the Cs to which they are attached form (unsatd.) fused carbocyclyl) or a salt thereof, are prepd. I are claimed for treatment of arterial hypertension, coronary artery spasms, asthma, irritable bowel syndrome, spastic bladder, ischemia, psychosis, convulsions. 2-Hydroxy-5-nitroaniline and 3-(trifluoromethyl)phenyl isocyanate were added to MePh and stirred overnight at room temp. to give I (X, Z = HN, Y= 0, B, D, E, F, = C, R1 = R3 = R4 = R12 = H, R2 = O2N, R11 = F3C) (II). The activity $(1-10 \cdot mu.M)$ was demonstrated by I (R2 = H, R3 = C1,everything else as in II). Pharmaceutical formulations comprising I are given.

```
L7 ANSWER 61 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 1994:655671 CAPLUS

DN 121:255671

- TI Preparation of N-phenyl-N'-heteroarylureas as 5HT2C receptor antagonists
- IN Forbes, Ian Thomson; Ham, Peter; Martin, Roger Thomas; Thompson, Mervyn
- PA SmithKline Beecham PLC, UK
- SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

| IAN. | PATENT NO. | KIND DATE | APPLICATION NO. | DATE | | | |
|------|-------------------------|------------------------------------|----------------------------------|------------------------------|--|--|--|
| PI | WO 9418170
W: JP, US | A1 19940818 | WO 1994-EP189 | 19940125 | | | |
| | RW: AT, BE, | CH, DE, DK, ES, FR, | GB, GR, IE, IT, LU, GB 1993-2275 | , MC, NL, PT, SE
19930205 | | | |
| | EP 682656
R: BE, CH, | A1 19951122
DE, FR, GB, IT, LI, | EP 1994-905697 | 19940125 | | | |
| | , . | , , , ,, | GB 1993-2275
WO 1994-EP189 | 19930205
19940125 | | | |
| | JP 08506114 | T2 19960702 | JP 1994-517583
GB 1993-2275 | 19940125
19930205 | | | |
| | | | WO 1994-EP189 | 19940125 | | | |

OS MARPAT 121:255671

AB R1NR2CONR3R4 [R1 = (un)substituted (iso)quinolinyl, -heteroaryl; R2,R3 = H, alkyl; R4 = (un)substituted Ph] were prepd. Thus, nicotinoyl azide was refluxed in PhMe after which 3,4-ClMeC6H3NH2 was added to give, after acidification, 3,4-ClMeC6H3NHCONHR1.HCl (R1 = 3-pyridyl) which had ID50 of 78mg/kg orally against mCPP-induced hypolocomotion in rats.

- L7 ANSWER 62 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1994:107056 CAPLUS
- DN 120:107056
- TI Preparation of 2-anilinopyrimidines as antiatherosclerotics and neoplasm inhibitors
- IN Zimmermann, Juerg
- PA Ciba-Geigy A.-G., Switz.

```
Eur. Pat. Appl., 23 pp.
     CODEN: EPXXDW
DT
    Patent
LА
    German
FAN.CNT 3
    PATENT NO. KIND DATE
                                    APPLICATION NO. DATE
    ___________
    EP 564409 A1 19931006
EP 564409 B1 20000119
PΙ
                                     EP 1993-810219 19930325
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                                      CH 1992-1083 A 19920403
    AT 188964
               E 20000215
                                      AT 1993-810219 19930325
                                      CH 1992-1083 A 19920403
    ES 2142857
              T3 20000501
                                      ES 1993-810219 19930325
                                      CH 1992-1083 A 19920403
    CA 2093203
                    AA
                        19931004
                                      CA 1993-2093203 19930401
    CA 2093203
                    С
                        20021126
                                      CH 1992-1083 A 19920403
    CZ 283944
               В6
                        19980715
                                      CZ 1993-560 19930401
                                      CH 1992-1083 A 19920403
    RU 2125992 C1 19990210
                                     RU 1993-5357 19930401
                                      CH 1992-1083 A 19920403
    IL 105264
               A1
                       19990411
                                     IL 1993-105264 19930401
                                      CH 1992-1083 A 19920403
    SK 280620
               B6 20000516
                                      SK 1993-280
                                                   19930401
                                      CH 1992-1083 A 19920403
    NO 9301283
              A 19931004
                                     NO 1993-1283 19930402
                                      CH 1992-1083 A 19920403
    ZA 9302397
              A 19931004
                                     ZA 1993-2397
                                                   19930402
                                      CH 1992-1083 A 19920403
    AU 9335694
                Al 19931007
                                     AU 1993-35694
                                                   19930402
    AU 666709
                   B2 19960222
                                     CH 1992-1083 A 19920403
    CN 1077713
                  A 19931027
                                     CN 1993-103566 19930402
    CN 1043531
                   B 19990602
                                     CH 1992-1083 A 19920403
    HU 64050
                   A2 19931129
                                     HU 1993-982
                                                  19930402
                                     CH 1992-1083 A 19920403
    JP 06087834
                   A2 19940329
                                     JP 1993-78096
                                                   19930405
    JP 2706682
                   B2 19980128
                                     CH 1992-1083 A 19920403
PATENT FAMILY INFORMATION:
FAN 1995:735375
    PATENT NO.
                  KIND DATE
                                    APPLICATION NO. DATE
    ______
    WO 9509852
PI
                                   WO 1994-EP3149 19940921
                   A1
                        19950413
       W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KP,
           KR, KZ, LK, LR, LT, LV, MD, MG, MN, NO, NZ, PL, RO, RU, SI, SK,
           TJ, TT, UA, UZ, VN
       RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
           MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
           TD, TG
                                     CH 1993-2966
                                                 A 19931001
                                     CH 1994-2278 A 19940718
    US 5543520 A 19960806
                                     US 1994-306333 19940915
                                     CH 1993-2966 A 19931001
                                     CH 1994-2278 A 19940718
```

| | CA 2148477 | AA | 19950413 | CA 1994-2148477 19940921 |
|----------|-------------------------|----------|----------------------|---|
| | AU 9476975
AU 693804 | A1
B2 | 19950501
19980709 | CH 1993-2966 A 19931001
AU 1994-76975 19940921 |
| | | | | CH 1993-2966 A 19931001
CH 1994-2278 A 19940718
WO 1994-EP3149 W 19940921 |
| | EP 672040 | A1 | 19950920 | EP 1994-927633 19940921 |
| | R: AT, BE, | CH, DE | , DK, ES, F | R, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE |
| | | | | CH 1993-2966 A 19931001 |
| | | | | CH 1994-2278 A 19940718 |
| | 00504004 | | | WO 1994-EP3149 W 19940921 |
| | JP 08504834 | Т2 | 19960528 | JP 1994-510576 19940921 |
| | | | | CH 1993-2966 A 19931001 |
| | | | | CH 1994-2278 A 19940718 |
| FAN | 1996:380210 | | | WO 1994-EP3149 W 19940921 |
| r AIN | | KIND | DATE | APPLICATION NO. DATE |
| ΡI | US 5521184 | Α | 19960528 | US 1994-234889 19940428 |
| | | | | CH 1992-1083 A 19920403 |
| | | | | US 1993-42322 B219930402 |
| | | | | CH 1993-2966 A 19931001 |
| | CA 2148477 | AA | 19950413 | CA 1994-2148477 19940921 |
| | | | | CH 1993-2966 A 19931001 |
| OS
GI | MARPAT 120:10705 | 56 | | |

$$R^{1}$$
 R^{8}
 R^{7}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{5}
 R^{6}

AB Title compds. [I; R1 = pyridyl, 4-pyrazinyl, (acyl)aminophenyl, etc.; R2, R3 = H, alkyl; 1 or 2 of R4-R8 = NO2, fluoroalkoxy, NR9C(:X)YnR10 and the others = H, alkyl, alkanoyl, CF3, etc.; R9 = H, alkyl; R10 = (cyclo)aliph. group, heterocyclyl, aryl, etc.; X = O, S, NH, etc.; Y = O or NH; n = O or 1] were prepd. Thus, 3-(O2N)C6H4NHC(:NH)NH2 [prepn. from 3-(O2N)C6H4NH2 given] was cyclocondensed with R1COCH:CHNMe2 (R1 = 3-pyridyl) (prepn. from 3-acetylpyridine given) to give I (R1 = 3-pyridyl, R2 = R3 = R5-R8 = H, R4 = NO2). I had IC50 of .apprx.0.5 to 5 .mu.M against protein kinase C in vitro.

- L7 ANSWER 63 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1994:77171 CAPLUS
- DN 120:77171
- TI Preparation of indolylurea derivatives as antagonists
- IN Forbes, Ian Thomson; Martin, Roger Thomas; Jones, Graham Elgin
- PA SmithKline Beecham PLC, UK

PCT Int. Appl., 36 pp. CODEN: PIXXD2 DT Patent LА English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ____ _____ ΡI WO 9318028 A1 19930916 WO 1993-GB449 19930304 W: AU, CA, JP, KR, NZ, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE GB 1992-5415 19920312 GB 1992-5416 19920312 GB 1992-5422 19920312 GB 1992-5442 19920312 AU 9336411 A1 19931005 AU 1993-36411 19930304 GB 1992-5415 19920312 GB 1992-5416 19920312 GB 1992-5422 19920312 GB 1992-5442 19920312 WO 1993-GB449 19930304 EP 630373 A1 19941228 EP 1993-905507 19930304 R: BE, CH, DE, FR, GB, IT, LI, NL GB 1992-5415 19920312 GB 1992-5416 19920312 GB 1992-5422 19920312 GB 1992-5442 19920312 WO 1993-GB449 19930304 JP 07504429 Т2 19950518 JP 1993-515449 19930304 GB 1992-5415 19920312 GB 1992-5416 19920312 GB 1992-5422 19920312 GB 1992-5442 19920312 WO 1993-GB449 19930304 ZA 9301713 Α 19940922 ZA 1993-1713 19930310 GB 1992-5415 19920312 US 5508288 19960416 Α US 1994-295694 19940830 GB 1992-5415 19920312 GB 1992-5416 19920312 GB 1992-5422 19920312 GB 1992-5442 19920312 WO 1993-GB449 19930304 OS MARPAT 120:77171

GΙ

Title compds. I (P = quinolinyl, isoquinolyl, 5,6-membered heterocyclyl; R1 = H, C1-6 alkyl; R2, R3, R10, R11 = C2-6 alkylene; R4 = H, C1-6 alkyl, AB halo, R8R9N, R12O, R12O2C wherein R8, R9, R12 = H, C1-6 alkyl; R5, R6 = H, C1-6 alkyl; R7 = H, C1-6 alkyl, C1-6 alkoxy, halo; etc.) or a salt thereof, are prepd. to NaH was added 5-amino-3-methylbisthiazole-HCl followed by N-(1-methyl-5-indolyl)carbamate (prepn. given) to give the title compd. II. The affinity of II for 5-HT1C binding site by assessing its ability to displace [3H]-mesulergine from 5-HT1C binding sites was shown by pA2 as 7.9.

- **L**7 ANSWER 64 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN
- 1993:552116 CAPLUS ΑN
- DN 119:152116
- TIUse of renin inhibitors for the treatment of glaucoma
- IN Tanaka, Yoko; Kagayama, Akira; Hata, Takehisa
- PA Fujisawa Pharmaceutical Co., Ltd., Japan
- SO PCT Int. Appl., 25 pp.
- CODEN: PIXXD2 Patent DT
- ĽΑ English
- FAN.CNT 1

| ran. | | TENT NO. | KIND D | PATE | APPLICATION NO. | DATE |
|------|-----|-----------------------|--------|-----------------------|---|----------------------|
| PI | WO | 9312796
W: AU, CA, | | 9930708
KR, RU, WS | WO 1992-JP1656 | 19921218 |
| | | | | | GB, GR, IE, IT, LU
GB 1991-27041 | |
| | ZA | 9209738 | A 1 | 9930617 | ZA 1992-9738
GB 1991-27041 | 19921215 |
| | ΑU | 9331712 | A1 1 | 9930728 | AU 1993-31712 | 19921218 |
| | AU | 661748 | B2 1 | 9950803 | | |
| | FΒ | 617622 | א 1 1 | 0041005 | GB 1991-27041
WO 1992-JP1656
EP 1993-900396 | |
| | בנם | | | | GB, GR, IE, IT, LI | LU, NL, PT, SE |
| | | | | | GB 1991-27041
WO 1992-JP1656 | 19911220
19921218 |
| | JP | 07506807 | T2 1: | 9950727 | | 19921218
19911220 |
| | | | | | WO 1992-JP1656 | 19921218 |
| | CN | 1088934 | A 1: | 9940706 | CN 1993-101190
GB 1991-27041 | 19930102
19911220 |

OS MARPAT 119:152116 GI

The renin-inhibiting histidine derivs. I [R1 = (un)substituted alkyl or amino; R2, R3 = H, alkyl; NR1R2 = heterocyclyl; R4 = alkyl] or I salts are drugs for the treatment of glaucoma. Eye application of 0.2% 2(S)-[N.alpha.-[2(S)-[N-methyl-N-[2-[N-(morpholinocarbonyl)-N-[2-[N-(morpholinocarbonyl)]]]methylamino]ethyl]aminocarbonyloxy]-3-phenylpropionyl]-N.alpha.-methyl-Lhistidyl]amino-1-cyclohexyl-3(S)-hydroxy-6-methylheptane-HCl lower intraocular pressure in the rabbit.

L7ANSWER 65 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

AN1991:449694 CAPLUS

DN 115:49694

TIPreparation of anylazole platelet activating factor (PAF) antagonists

Schromm, Kurt; Mentrup, Anton; Renth, Ernst Otto; Birke, Franz; Heuer, Hubert; Muacevic, Gojko

PΑ Boehringer Ingelheim K.-G., Germany

Ger. Offen., 21 pp. SO

CODEN: GWXXBX

DT Patent

LΑ German

| FAN. | CNT | 2 | | | | | | | | | |
|------|-----|--------|-----|-----|-----|-----|-------|------|-----|-----------------------------------|---|
| | PA' | TENT N | 0. | | KI | ND | DATE | | | APPLICATION NO. DATE | |
| PI | DE | 39274 | 83 | | A | 1 | 1991 | 0221 | | DE 1989-3927483 1989081 | |
| | WO | | | | | | | | | WO 1990-EP1340 19900810
SU, US | δ |
| | | | | | | | | | | GB, IT, LU, NL, SE | |
| | | | | | | | | | | DE 1989-3927483 19890819 | 9 |
| | WO | 91027 | 31 | | A. | 1 | 1991 | 0307 | | WO 1990-EP1341 19900816 | б |
| | | | | | | | | | | SU, US | |
| | | RW: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, IT, LU, NL, SE | |
| | | | | | | | | | | DE 1989-3927483 19890819 | Э |
| | | | | | | | | | | DE 1989-3929655 19890906 | 5 |
| | AU | 90615 | 71 | | A. | 1 | 1991 | 0403 | | AU 1990-61571 19900816 | 5 |
| | | | | | | | | | | DE 1989-3927483 19890819 | Э |
| | | | | | | | | | | DE 1989-3929655 19890906 | 5 |
| | | | | | | _ | | | | WO 1990-EP1341 19900816 | 5 |
| | AU | 90616 | 00 | | A. | L | 1991 | 0403 | | 110 1000 01000 1000010 | 5 |
| | | | | | | | | | | DE 1989-3927483 19890819 |) |
| | | 00000 | ^ | | | _ | | | | WO 1990-EP1340 19900816 | õ |
| | DD | 29892 | 8 | | A. |) | 19920 | 0319 | | DD 1990-343519 19900817 | 1 |
| | | | | | | | | | | DE 1989-3927483 19890819 |) |

PATENT FAMILY INFORMATION:

| FAN | 1991:449686 PATENT NO. | KIND | DATE | | APPLICATION NO. | DATE |
|----------|--------------------------|----------|------------------------|---|--|--|
| PI | DE 3929655
WO 9102731 | A1
A1 | 19910307
19910307 | | DE 1989-3929655
WO 1990-EP1341 | 19890906
19900816 |
| | | | , JP, KR,
, DK, ES, | • | SU, US
GB, IT, LU, NL, SE
DE 1989-3927483
DE 1989-3929655 | 19890819 |
| | AU 9061571 | A1 | 19910403 | | AU 1990-61571
DE 1989-3927483
DE 1989-3929655 | 19890906
19900816
19890819
19890906 |
| OS
GT | MARPAT 115:4969 | 4 | | | WO 1990-EP1341 | 19900816 |

$$R^{1}QT$$
 VR^{2} OMe N N N Q^{1} OMe O

AB Title compds. [I; R1 = (substituted) Ph, 5- or 6-membered heteroaryl; R2 = H, (unsatd.) (O-, S-, or imino-interrupted) (substituted) alkyl, cycloaliphatyl, aminoalky; R3 = (substituted) (polynuclear) (arom.) carbocyclyl, N-heterocyclyl; M, U = N, alkylimino, CH, alkylmethine; T, V, W = N, C; M, V may addnl. = S; B = CH:CH, S, O, imino, etc.; Q-Q3 = bond, C1-3 alkylene; dotted lines = double bonds when possible], were prepd. as PAF antagonists (no data). Thus, 3,5-(MeO)2C6H3CO2H was refluxed with SOC12 in CHCl3 to give the acid chloride, which was condensed with 4-H2NC6H4CO2Et in the presence of Et3N to give the amide, which was refluxed with PCl5 in PhMe to give the imide chloride. This was stirred with NaN3 in DMF to give Et 4-[5-(3,5-dimethoxyphenyl)-1H-tetrazol-1yl]benzoate. The latter was treated as above to give the acid chloride, which was heated with 3-aminopyridine in dioxane to give title compd. II.

=> d his

(FILE 'HOME' ENTERED AT 16:13:35 ON 10 DEC 2003)

FILE 'REGISTRY' ENTERED AT 16:13:45 ON 10 DEC 2003 STRUCTURE UPLOADED

L1L2 3 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 16:14:18 ON 10 DEC 2003 L3 65 S L1 SSS FULL

```
FILE 'CAOLD' ENTERED AT 16:15:11 ON 10 DEC 2003
                 s L1
      FILE 'REGISTRY' ENTERED AT 16:15:17 ON 10 DEC 2003
L4
               3 S L1 SSS FULL
     FILE 'CAOLD' ENTERED AT 16:15:18 ON 10 DEC 2003
L5
               0 S L4 SSS FULL
     FILE 'CAPLUS' ENTERED AT 16:15:28 ON 10 DEC 2003
L6
              1 S L2
L7
              65 S L3
Ь8
              1 S L4
L9
              0 S L6 AND L7 AND L8
L10
              1 S L8 AND L6
=> d 110 fbib hitstr abs total
L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
     2002:695962 CAPLUS
AN
DN
     137:232680
TI
     Preparation of aryl and heteroaryl urea selective Chkl inhibitors for use
     as radiosensitizers and chemosensitizers for treating diseases and
     conditions related to DNA damage or lesions in DNA replication
IN
     Keegan, Kathleen S.; Kesicki, Edward A.; Gaudino, John Joseph; Cook, Adam
     Wade; Cowen, Scott Douglas; Burgess, Laurence Edward
PA
     Icos Corporation, USA
SO
     PCT Int. Appl., 236 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                  KIND DATE
                                     APPLICATION NO. DATE
     WO 2002070494 A1 20020912 WO 2002-US6452 20020301
PΤ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                           US 2001-273124PP 20010302
     US 2003069284
                       A1 20030410
                                            US 2002-87715
                                                           20020301
                                            US 2001-273124PP 20010302
    MARPAT 137:232680
OS
     457096-69-4P, 1-(5-Amino-2-methoxyphenyl)-3-(pyrazin-2-yl)urea
IT
     457096-75-2P, 1-(4-Amino-2-methoxyphenyl)-3-(pyrazin-2-yl)urea
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (intermediate; prepn. of aryl and heteroaryl urea selective Chkl
        inhibitors for use as radiosensitizers and chemosensitizers for
        treating diseases and conditions related to DNA damage or lesions in
        DNA replication)
```

RN 457096-69-4 CAPLUS

CN Urea, N-(5-amino-2-methoxyphenyl)-N'-pyrazinyl- (9CI) (CA INDEX NAME)

RN 457096-75-2 CAPLUS

CN Urea, N-(4-amino-2-methoxyphenyl)-N'-pyrazinyl- (9CI) (CA INDEX NAME)

Aryl- and heteroaryl substituted urea compds. (W'NHC(:Y')N(R13)Z'; 1) AB useful in the treatment of diseases and conditions related to DNA damage or lesions in DNA replication are disclosed. In 1, W' is a six-membered arom. ring contg. at least 2 nitrogen atoms (e.g. pyrazinyl, pyrimidinyl, pyridazinyl, 1,2,4-triazinyl, quinoxalinyl) and optionally substituted as defined in the claims, Z' is a five- or six membered arom. or heteroarom. ring as defined in the claims, Y' is O or S. The first claim contains a much more general formula WX1C(:Y)X2Z (e.g. X1 = null, O, S, CH2, NR1; X2 = 0, S, NR1) but emphasis is on 1. Methods of making the compds., and their use as therapeutic agents, for example, in treating cancer and other diseases characterized by defects in DNA replication, chromosome segregation, or cell division also are described. Although the methods of prepn. are not claimed, about 200 example prepns. are included. N-(2-methoxy-5-methylphenyl)-N'-(2-pyrazinyl)urea and N-(4-chloro-2methoxyphenyl)-N'-(2-pyrazinyl)urea enhanced the killing of various human cells by 5-fluorouracil from 2- to 10-fold; in HeLa cells, these same compds. enhanced killing by irradn. 2-3 fold.

<12/10/2003>

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 16:13:35 ON 10 DEC 2003)

FILE 'REGISTRY' ENTERED AT 16:13:45 ON 10 DEC 2003

L1 STRUCTURE UPLOADED

L2 3 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 16:14:18 ON 10 DEC 2003 L3 65 S L1 SSS FULL

```
FILE 'CAOLD' ENTERED AT 16:15:11 ON 10 DEC 2003
      FILE 'REGISTRY' ENTERED AT 16:15:17 ON 10 DEC 2003
L4
                3 S L1 SSS FULL
      FILE 'CAOLD' ENTERED AT 16:15:18 ON 10 DEC 2003
L5
                0 S L4 SSS FULL
      FILE 'CAPLUS' ENTERED AT 16:15:28 ON 10 DEC 2003
L6
                1 S L2
L7
               65 S L3
L8
                1 S L4
Ь9
                0 S L6 AND L7 AND L8
                1 S L8 AND L6
=> d 16 fbib hitstr abs total
     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
L6
ΑN
     2002:695962 CAPLUS
DN
     137:232680
TΙ
     Preparation of aryl and heteroaryl urea selective Chkl inhibitors for use
      as radiosensitizers and chemosensitizers for treating diseases and
      conditions related to DNA damage or lesions in DNA replication
IN
     Keegan, Kathleen S.; Kesicki, Edward A.; Gaudino, John Joseph; Cook, Adam
     Wade; Cowen, Scott Douglas; Burgess, Laurence Edward
     Icos Corporation, USA
PΑ
     PCT Int. Appl., 236 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                             APPLICATION NO. DATE
     _____
                       ----
                                               ______
PΤ
     WO 2002070494
                       A1 20020912
                                             WO 2002-US6452 20020301
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
         PL, PT, RO, RO, SE, SE, SG, SI, SA, SL, TO, IT, TN, IR, II, I2, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                               US 2001-273124PP 20010302
     US 2003069284
                         A1
                               20030410
                                               US 2002-87715 20020301
                                               US 2001-273124PP 20010302
OS
     MARPAT 137:232680
     457096-69-4P, 1-(5-Amino-2-methoxyphenyl)-3-(pyrazin-2-yl)urea
IT
     457096-75-2P, 1-(4-Amino-2-methoxyphenyl)-3-(pyrazin-2-yl)urea
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
         (intermediate; prepn. of aryl and heteroaryl urea selective Chk1
        inhibitors for use as radiosensitizers and chemosensitizers for
        treating diseases and conditions related to DNA damage or lesions in
```

DNA replication)

RN 457096-69-4 CAPLUS

CN Urea, N-(5-amino-2-methoxyphenyl)-N'-pyrazinyl- (9CI) (CA INDEX NAME)

RN 457096-75-2 CAPLUS

CN Urea, N-(4-amino-2-methoxyphenyl)-N'-pyrazinyl- (9CI) (CA INDEX NAME)

AΒ Aryl- and heteroaryl substituted urea compds. (W'NHC(:Y')N(R13)Z'; 1) useful in the treatment of diseases and conditions related to DNA damage or lesions in DNA replication are disclosed. In 1, W' is a six-membered arom. ring contg. at least 2 nitrogen atoms (e.g. pyrazinyl, pyrimidinyl, pyridazinyl, 1,2,4-triazinyl, quinoxalinyl) and optionally substituted as defined in the claims, Z' is a five- or six membered arom. or heteroarom. ring as defined in the claims, Y' is O or S. The first claim contains a much more general formula WX1C(:Y)X2Z (e.g. X1 = null, O, S, CH2, NR1; X2 = O, S, NR1) but emphasis is on 1. Methods of making the compds., and their use as therapeutic agents, for example, in treating cancer and other diseases characterized by defects in DNA replication, chromosome segregation, or cell division also are described. Although the methods of prepn. are not claimed, about 200 example prepns. are included. N-(2-methoxy-5-methylphenyl)-N'-(2-pyrazinyl)urea and N-(4-chloro-2methoxyphenyl)-N'-(2-pyrazinyl)urea enhanced the killing of various human cells by 5-fluorouracil from 2- to 10-fold; in HeLa cells, these same compds. enhanced killing by irradn. 2-3 fold.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 16:13:35 ON 10 DEC 2003)

FILE 'REGISTRY' ENTERED AT 16:13:45 ON 10 DEC 2003

L1 STRUCTURE UPLOADED

L2 3 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 16:14:18 ON 10 DEC 2003

```
L3
                65 S L1 SSS FULL
      FILE 'CAOLD' ENTERED AT 16:15:11 ON 10 DEC 2003
                   S L1
      FILE 'REGISTRY' ENTERED AT 16:15:17 ON 10 DEC 2003
L4
                 3 S L1 SSS FULL
      FILE 'CAOLD' ENTERED AT 16:15:18 ON 10 DEC 2003
L5
                 0 S L4 SSS FULL
      FILE 'CAPLUS' ENTERED AT 16:15:28 ON 10 DEC 2003
L6
                1 S L2
L7
                65 S L3
Г8
                1 S L4
T.9
                0 S L6 AND L7 AND L8
L10
                1 S L8 AND L6
=> d 18 fbib hitstr abs total
1.8
      ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
ΑN
      2002:695962 CAPLUS
DN
      137:232680
TΙ
      Preparation of aryl and heteroaryl urea selective Chkl inhibitors for use
      as radiosensitizers and chemosensitizers for treating diseases and
      conditions related to DNA damage or lesions in DNA replication
IN
      Keegan, Kathleen S.; Kesicki, Edward A.; Gaudino, John Joseph; Cook, Adam
      Wade; Cowen, Scott Douglas; Burgess, Laurence Edward
PA
      Icos Corporation, USA
SO
      PCT Int. Appl., 236 pp.
      CODEN: PIXXD2
DT
     Patent
LА
     English
FAN.CNT 1
     PATENT NO. KIND DATE
                                         APPLICATION NO. DATE
     WO 2002070494 A1 20020912 WO 2002-US6452 20020301
PI
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
          PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                 US 2001-273124PP 20010302
     US 2003069284
                          A1 20030410
                                                 US 2002-87715
                                                                    20020301
                                                  US 2001-273124PP 20010302
OS
     MARPAT 137:232680
     457096-69-4P, 1-(5-Amino-2-methoxyphenyl)-3-(pyrazin-2-yl)urea
IT
     457096-75-2P, 1-(4-Amino-2-methoxyphenyl)-3-(pyrazin-2-yl)urea
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
      (Preparation); RACT (Reactant or reagent); USES (Uses)
         (intermediate; prepn. of aryl and heteroaryl urea selective Chk1
         inhibitors for use as radiosensitizers and chemosensitizers for
```

treating diseases and conditions related to DNA damage or lesions in DNA replication)

RN 457096-69-4 CAPLUS

CN Urea, N-(5-amino-2-methoxyphenyl)-N'-pyrazinyl- (9CI) (CA INDEX NAME)

RN 457096-75-2 CAPLUS

CN Urea, N-(4-amino-2-methoxyphenyl)-N'-pyrazinyl- (9CI) (CA INDEX NAME)

AΒ Aryl- and heteroaryl substituted urea compds. (W'NHC(:Y')N(R13)Z'; 1) useful in the treatment of diseases and conditions related to DNA damage or lesions in DNA replication are disclosed. In 1, W' is a six-membered arom. ring contg. at least 2 nitrogen atoms (e.g. pyrazinyl, pyrimidinyl, pyridazinyl, 1,2,4-triazinyl, quinoxalinyl) and optionally substituted as defined in the claims, Z' is a five- or six membered arom. or heteroarom. ring as defined in the claims, Y' is O or S. The first claim contains a much more general formula WX1C(:Y)X2Z (e.g. X1 = null, O, S, CH2, NR1; X2 = O, S, NR1) but emphasis is on 1. Methods of making the compds., and their use as therapeutic agents, for example, in treating cancer and other diseases characterized by defects in DNA replication, chromosome segregation, or cell division also are described. Although the methods of prepn. are not claimed, about 200 example prepns. are included. N-(2-methoxy-5-methylphenyl)-N'-(2-pyrazinyl)urea and N-(4-chloro-2- $\label{lem:methoxyphenyl} \mbox{methoxyphenyl)-N'-(2-pyrazinyl)} \mbox{urea enhanced the killing of various human}$ cells by 5-fluorouracil from 2- to 10-fold; in HeLa cells, these same compds. enhanced killing by irradn. 2-3 fold.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s CHK1

L11 379 CHK1

=> d his

(FILE 'HOME' ENTERED AT 16:13:35 ON 10 DEC 2003)

FILE 'REGISTRY' ENTERED AT 16:13:45 ON 10 DEC 2003

```
L1
               STRUCTURE UPLOADED
L2
              3 S L1 SSS FULL
     FILE 'MARPAT' ENTERED AT 16:14:18 ON 10 DEC 2003
L3
             65 S L1 SSS FULL
     FILE 'CAOLD' ENTERED AT 16:15:11 ON 10 DEC 2003
                S L1
     FILE 'REGISTRY' ENTERED AT 16:15:17 ON 10 DEC 2003
L4
              3 S L1 SSS FULL
     FILE 'CAOLD' ENTERED AT 16:15:18 ON 10 DEC 2003
L5
              0 S L4 SSS FULL
     FILE 'CAPLUS' ENTERED AT 16:15:28 ON 10 DEC 2003
L6
             1 S L2
             65 S L3
L7
L8
             1 S L4
              0 S L6 AND L7 AND L8
L9
L10
             1 S L8 AND L6
L11
            379 S CHK1
=> s 111 and 17
L12
         0 L11 AND L7
=> s 111 and 16
L13
            1 L11 AND L6
=> s 111 and 110
            1 L11 AND L10
=> d l13 fbib hitstr abs total
L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
     2002:695962 CAPLUS
AN
DN
    137:232680
    Preparation of aryl and heteroaryl urea selective Chk1
TΙ
     inhibitors for use as radiosensitizers and chemosensitizers for treating
     diseases and conditions related to DNA damage or lesions in DNA
     replication
    Keegan, Kathleen S.; Kesicki, Edward A.; Gaudino, John Joseph; Cook, Adam
IN
    Wade; Cowen, Scott Douglas; Burgess, Laurence Edward
PA
    Icos Corporation, USA
SO
    PCT Int. Appl., 236 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LΑ
FAN.CNT 1
    PATENT NO.
                   KIND DATE
                                        APPLICATION NO. DATE
    WO 2002070404
                                         ______
                     A1 20020912 WO 2002-US6452 20020301
PΙ
    WO 2002070494
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
```

20030410

UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2001-273124PP 20010302 US 2002-87715 20020301 US 2001-273124PP 20010302

OS MARPAT 137:232680

US 2003069284

A1

457096-69-4P, 1-(5-Amino-2-methoxyphenyl)-3-(pyrazin-2-yl)urea
457096-75-2P, 1-(4-Amino-2-methoxyphenyl)-3-(pyrazin-2-yl)urea
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (intermediate; prepn. of aryl and heteroaryl urea selective
Chk1 inhibitors for use as radiosensitizers and

Chk1 inhibitors for use as radiosensitizers and chemosensitizers for treating diseases and conditions related to DNA damage or lesions in DNA replication)

RN 457096-69-4 CAPLUS

CN Urea, N-(5-amino-2-methoxyphenyl)-N'-pyrazinyl- (9CI) (CA INDEX NAME)

RN 457096-75-2 CAPLUS

CN Urea, N-(4-amino-2-methoxyphenyl)-N'-pyrazinyl- (9CI) (CA INDEX NAME)

AB Aryl- and heteroaryl substituted urea compds. (W'NHC(:Y')N(R13)Z'; 1) useful in the treatment of diseases and conditions related to DNA damage or lesions in DNA replication are disclosed. In 1, W' is a six-membered arom. ring contg. at least 2 nitrogen atoms (e.g. pyrazinyl, pyrimidinyl, pyridazinyl, 1,2,4-triazinyl, quinoxalinyl) and optionally substituted as defined in the claims, Z' is a five- or six membered arom. or heteroarom. ring as defined in the claims, Y' is O or S. The first claim contains a much more general formula WX1C(:Y)X2Z (e.g. X1 = null, O, S, CH2, NR1; X2 = O, S, NR1) but emphasis is on 1. Methods of making the compds., and their use as therapeutic agents, for example, in treating cancer and other diseases characterized by defects in DNA replication, chromosome segregation, or cell division also are described. Although the methods of prepn. are not claimed, about 200 example prepns. are included. N-(2-methoxy-5-methylphenyl)-N'-(2-pyrazinyl) urea and N-(4-chloro-2-

```
methoxyphenyl)-N'-(2-pyrazinyl)urea enhanced the killing of various human cells by 5-fluorouracil from 2- to 10-fold; in HeLa cells, these same compds. enhanced killing by irradn. 2-3 fold.
```

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> d his
```

L4

```
(FILE 'HOME' ENTERED AT 16:13:35 ON 10 DEC 2003)
```

```
FILE 'REGISTRY' ENTERED AT 16:13:45 ON 10 DEC 2003

STRUCTURE UPLOADED
```

L1 STRUCTURE UPLOA L2 3 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 16:14:18 ON 10 DEC 2003 L3 65 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 16:15:11 ON 10 DEC 2003

FILE 'REGISTRY' ENTERED AT 16:15:17 ON 10 DEC 2003 3 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 16:15:18 ON 10 DEC 2003 L5 0 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 16:15:28 ON 10 DEC 2003

L6 1 S L2 L7 65 S L3 L8 1 S L4

L9 0 S L6 AND L7 AND L8

L10 1 S L8 AND L6

L11 379 S CHK1

L12 0 S L11 AND L7

L13 1 S L11 AND L6

L14 1 S L11 AND L10

=> s 111 and pyrazine

L15 3 L11 AND PYRAZINE

=> d 115 fbib hitstr abstotal

'ABSTOTAL' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ---- GI and AB

ALL ----- BIB, AB, IND, RE

APPS ----- AI, PRAI

BIB ----- AN, plus Bibliographic Data and PI table (default)

CAN ----- List of CA abstract numbers without answer numbers

CBIB ----- AN, plus Compressed Bibliographic Data

DALL ----- ALL, delimited (end of each field identified)

DMAX ----- MAX, delimited for post-processing

FAM ----- AN, PI and PRAI in table, plus Patent Family data

FBIB ----- AN, BIB, plus Patent FAM

IND ----- Indexing data

| MAX
PATS
SAM | International Patent Classifications ALL, plus Patent FAM, RE PI, SO CC, SX, TI, ST, IT CC, SX, TI, ST, IT (random display, no answer numbers; SCAN must be entered on the same line as the DISPLAY, e.g., D SCAN or DISPLAY SCAN) |
|----------------------|--|
| STD | BIB, IPC, and NCL |
| IALL
IBIB
IMAX | ABS, indented with text labels ALL, indented with text labels BIB, indented with text labels MAX, indented with text labels STD, indented with text labels |
| OBIB | AN, plus Bibliographic Data (original) OBIB, indented with text labels |
| SBIB | BIB, no citations IBIB, no citations |
| HIT
HITIND | Fields containing hit terms IC, ICA, ICI, NCL, CC and index field (ST and IT) containing hit terms |
| HITSTR | HIT RN and its text modification HIT RN, its text modification, its CA index name, and its structure diagram |
| HITSEQ | HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields |
| FHITSTR | First HIT RN, its text modification, its CA index name, and |
| | its structure diagram First HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields |
| KWIC | Hit term plus 20 words on either side
Number of occurrence of hit term and field in which it occurs |

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number. ENTER DISPLAY FORMAT (BIB):BIB

- L15 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:892800 CAPLUS
- TI Preparation of substituted **pyrazines** as protein kinase modulators
- IN Buhr, Chris A.; Baik, Tae-Gon; Ma, Sunghoon; Tesfai, Zerom; Wang, Longcheng; Co, Erick Wang; Epshteyn, Sergey; Kennedy, Abigail R.; Chen, Baili; Dubenko, Larisa; Anand, Neel Kumar; Tsang, Tsze H.; Nuss, John M.; Peto, Csaba J.; Rice, Kenneth D.; Ibrahim, Mohamed Abdulkader; Schnepp, Kevin Luke; Shi, Xian; Leahy, James William; Chen, Jeff; Dalrymple, Lisa

```
Esther; Forsyth, Thimothy Patrick; Huynh, Tai Phat; Mann, Grace; Mann,
    Lary Wayne; Takeuchi, Craig Stacy
PA
    Exelixis, Inc., USA
    PCT Int. Appl., 468 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
                         _____
                                        _____
                                   WO 2003-US13869 20030502
    WO 2003093297 A2 20031113
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
            MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
            CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
            NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
            GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-377933P P 20020503
=> d 115 all
    ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
AN
    2003:892800 CAPLUS
    Entered STN: 14 Nov 2003
ED
    Preparation of substituted pyrazines as protein kinase
TI
    modulators
    Buhr, Chris A.; Baik, Tae-Gon; Ma, Sunghoon; Tesfai, Zerom; Wang,
IN
    Longcheng; Co, Erick Wang; Epshteyn, Sergey; Kennedy, Abigail R.; Chen,
    Baili; Dubenko, Larisa; Anand, Neel Kumar; Tsang, Tsze H.; Nuss, John M.;
    Peto, Csaba J.; Rice, Kenneth D.; Ibrahim, Mohamed Abdulkader; Schnepp,
    Kevin Luke; Shi, Xian; Leahy, James William; Chen, Jeff; Dalrymple, Lisa
    Esther; Forsyth, Thimothy Patrick; Huynh, Tai Phat; Mann, Grace; Mann,
    Lary Wayne; Takeuchi, Craig Stacy
    Exelixis, Inc., USA
PA
    PCT Int. Appl., 468 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LΑ
    English
    ICM C07K
    28-17 (Heterocyclic Compounds (More Than One Hetero Atom))
    Section cross-reference(s): 1, 63
FAN.CNT 1
                                       APPLICATION NO. DATE
                    KIND DATE
    PATENT NO.
                                        _____
                                      WO 2003-US13869 20030502
                    A2
                          20031113
    WO 2003093297
PΙ
        PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
```

```
MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-377933P P 20020503
GI
```

This invention relates to compds. I [R1 = H, halo, CN, etc.; R2, R3 = H, alkyl, aryl, etc.; R4 = H, alkyl, aryl, etc.; Z = N, CH; A = CO, CS, C(:NR6), R7 (when A = R7, E does not exist); R6 = H, NO2, CN, etc.; R7 = (un) substituted 5-7 membered heterocyclyl; E = NR8R9, NNR2R3, OR4, etc.; R8 = H, alkyl; R9 = H, heteroarylalkyl, etc.; NR8R9 = (un)substituted 5-7 membered heteroalicyclyl; W = 6-10 membered arylene, 5-10 membered heteroarylene; X = a bond, (un) substituted alkylene, O(CH2)2-30, etc.; Y = H, alkyl, aryl, etc.; with provisos] for modulating protein kinase enzymic activity for modulating cellular activities such as proliferation, differentiation, programmed cell death, migration and chemoinvasion, and to pharmaceutical compns. contg. such compds. Even more specifically, the invention relates to compds. I that inhibit, regulate and/or modulate kinases, particularly Checkpoint Kinases, even more particularly Checkpoint Kinase 1, or Chk1. Prepn. of representative compds. I is described. Thus, amidation of 3-amino-6-phenylpyrazinecarboxylic acid (prepn. given) with benzylamine afforded 67% 3-amino-6-phenyl-N-(phenylmethyl)pyrazine-2-carboxamide which showed IC50 of 10,000 nM or greater against Chk1. Table presenting activity data with respect to Chk1 for over 1000 compds. I is given. Methods of therapeutically or prophylactically using the compds. I and compns. to treat kinase-dependent diseases and conditions are also an aspect of the invention, and include methods of treating cancer, as well as other disease states assocd. with unwanted angiogenesis and/or cellular proliferation, by administering effective amts. of such compds.

ST **pyrazine** prepn checkpoint kinase **Chk1** protein kinase modulator antitumor

IT INDEXING IN PROGRESS

IT Human

IT

(prepn. of protein kinase modulators)

IT UV radiation

(prepn. of substituted **pyrazines** as protein kinase modulators for use in combination with UV radiation)

IT Alkylating agents, biological

Antibiotics

Antitumor agents

Neoplasm

(prepn. of substituted **pyrazines** as protein kinase modulators for use in combination with other cancer therapeutic agents)
Antisense DNA

```
Antisense RNA
     Interleukins
     Ribozvmes
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (prepn. of substituted pyrazines as protein kinase modulators
        for use in combination with other cancer therapeutic agents)
IT
     Alkaloids
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (vinca; prepn. of substituted pyrazines as protein kinase
        modulators for use in combination with other cancer therapeutic agents)
TT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (.alpha.; prepn. of substituted pyrazines as protein kinase
        modulators for use in combination with other cancer therapeutic agents)
IT
     154907-65-0
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (Chk1; prepn. of substituted pyrazines as protein
        kinase modulators)
IT
     142805-56-9, Topoisomerase II
                                     143180-75-0
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; prepn. of substituted pyrazines as protein
        kinase modulators for use in combination with other cancer therapeutic
IT
     70-11-1, Bromoacetophenone 91-59-8, Naphthalen-2-amine
    N-Phenylpiperazine 95-54-5, 1,2-Phenylenediamine 100-07-2, p-Anisoyl chloride 100-46-9, Benzylamine 100-51-6, Benzyl alcohol 100-52-7,
    Benzaldehyde
                   100-53-8, Benzylmercaptan 100-63-0, Phenylhydrazine
    103-63-9, 2-(Bromoethyl)benzene 103-80-0, Phenylacetyl chloride
    104-86-9, 4-Chlorobenzylamine 107-19-7, Prop-2-yn-1-ol 110-91-8,
                 456-22-4, 4-Fluorobenzoic acid 591-19-5, 3-Bromoaniline
    Morpholine
    613-94-5, Benzoic hydrazide 615-21-4, 2-Hydrazinobenzothiazole
    622-40-2, 2-(Morpholin-4-yl)ethanol 622-95-7, 4-Chlorobenzyl bromide
    626-58-4, 4-Methylpiperidine 644-36-0, 2-Methylphenylacetic acid
    697-64-3, (R)-1-Indanol
                             960-16-7, Tributyl(phenyl)stannane 1656-44-6,
    2,4-Dinitrobenzenesulfonyl chloride 1924-77-2, 2-Phenylbenzylamine
    2361-27-5, Thiophene-2-carboxylic acid hydrazide 2905-24-0,
    3-Bromobenzenesulfonyl chloride 3173-56-6, Benzyl isocyanate
    3272-08-0, 3-Nitro-4-hydroxybenzonitrile 4403-71-8, [4-
    (Aminomethyl)phenyl]amine 4524-93-0, Cyclopentanecarbonyl chloride
    5006-62-2, Ethyl nipecotate 6165-68-0, Thiophene-2-boronic acid
    6966-01-4, Methyl 3-amino-6-bromopyrazine-2-carboxylate 13922-41-3,
    1-Naphthylboronic acid 15205-15-9, 2-Chloro-6-fluorobenzylamine
    16298-03-6, Methyl 3-aminopyrazine-2-carboxylate 17231-51-5,
    3-Amino-6-bromopyrazine-2-carbonitrile
                                            17318-03-5, 3-
    Fluorophenylmagnesium bromide 17933-03-8, 3-Methylphenylboronic acid
    19501-58-7, 4-Methoxyphenylhydrazine hydrochloride
                                                         20826-04-4,
    5-Bromonicotinic acid 25487-66-5, 3-Carboxybenzeneboronic acid
    30418-59-8, 3-Aminophenylboronic acid
                                            34598-49-7, 5-Bromo-1-indanone
    37675-18-6, (S)-Ethyl nipecotate
                                       51760-21-5, 5-Bromoisophthalic acid
    dimethyl ester
                     52833-94-0, 2-Amino-5-bromopyridine-3-carboxylic acid
    57848-46-1, 4-Bromo-2-fluorobenzaldehyde
                                               58481-01-9, 2-Aminoisonicotinic
                     61341-86-4, (S)-1-Aminoindan
    acid hydrazide
                                                    72235-57-5.
    4-Chloro-2-fluorobenzylamine 87199-15-3, 3-(Hydroxymethyl)phenylboronic
           87199-18-6, 3-Hydroxyphenylboronic acid
                                                      99769-19-4,
    3-Methoxycarbonylphenylboronic acid 184000-11-1, 4-
    Benzyloxycarbonylphenylboronic acid
                                          235106-09-9, 3-Fluoro-4-
```

trifluoromethylbenzylamine 251085-87-7, Methyl 5-bromo-2-chlorobenzoate

477904-89-5, Benzenecarboximidamide hydrochloride 486424-37-7, 3-Amino-6-bromopyrazine-2-carboxylic acid RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of protein kinase modulators) 50-07-7, Mitomycin C 50-18-0, Cyclophosphamide 50-44-2, Mercaptopurine IT 50-76-0, Dactinomycin 51-18-3, Triethylenemelamine 51-21-8, 51-75-2, Mechlorethamine 52-24-4, Thiotepa 5-Fluorouracil 53-03-2, Prednisone 53-19-0, Mitotane 55-86-7, Nitrogen mustard 55-98-1, 56-53-1, Diethylstilbestrol 57-22-7, Vincristine 57-63-6, Busulfan Ethinyl estradiol 57-85-2, Testosterone propionate 59-05-2, Methotrexate 68-76-8, Trenimon 71-58-9, Medroxyprogesterone acetate 76-43-7, Fluoxymesterone 125-84-8, Aminoglutethimide 127-07-1, Hydroxyurea 147-94-4, Ara-C 148-82-3, Melphalan 154-42-7, Thioguanine 154-93-8, BCNU 305-03-3, Chlorambucil 320-67-2, 5-Azacytidine 595-33-5, Megestrol acetate 630-56-8, Hydroxyprogesterone caproate 645-05-6, Hexamethylmelamine 671-16-9, Procarbazine 738-70-5, Trimethoprim 865-21-4, Vinblastine 2998-57-4, Estramustine 3094-09-5, Furtulon 3778-73-2, Ifosfamide 4342-03-4, Dacarbazine 7689-03-4, Camptothecin 9015-68-3, L-Asparaginase 10318-26-0, Dibromodulcitol 10540-29-1, Tamoxifen 11056-06-7, Bleomycin 13010-47-4, CCNU 13311-84-7, Flutamide 13909-09-6, Methyl-CCNU 15663-27-1, Cisplatin 16268-62-5, Pentamethylmelamine 17902-23-7, Ftorafur 18378-89-7, Mithramycin 18883-66-4, Streptozotocin 20830-81-3, Daunorubicin 21416-67-1, Razoxane 23214-92-8, Doxorubicin 23261-20-3, Dianhydrogalactitol 24584-09-6, Dexrazoxane 29069-24-7, Prednimustine 29767-20-2, Teniposide 33069-62-4, Paclitaxel 33419-42-0, Etoposide 41575-94-4, Carboplatin 51264-14-3, Amsacrine 53714-56-0, Leuprolide 53910-25-1, Pentostatin 54749-90-5, Chlorozotocin 56420-45-2, Epirubicin 58957-92-9, Idarubicin 59989-18-3, Eniluracil 61825-94-3, Oxaliplatin 80576-83-6, Edatrexate 85622-93-1, Temozolomide 91421-42-0, 9-Nitrocamptothecin 91421-43-1, 9-Aminocamptothecin 95058-81-4, Gemcitabine 97682-44-5, Irinotecan 112887-68-0, Raltitrexed 114977-28-5, Docetaxel 117091-64-2, Etoposide Phosphate 123948-87-8, Topotecan 147149-76-6, Nolatrexed 152459-95-5, Imatinib 154361-50-9, Capecitabine 203923-89-1, Karenitecin RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (prepn. of substituted pyrazines as protein kinase modulators for use in combination with other cancer therapeutic agents)

| => log y
COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
|--|-----------------|-------------------|
| FULL ESTIMATED COST | ENTRY
246.84 | SESSION 648.70 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| CA SUBSCRIBER PRICE | ENTRY
-45.57 | SESSION
-45.57 |

STN INTERNATIONAL LOGOFF AT 16:21:38 ON 10 DEC 2003